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APPLICATION OF THE NATIONAL ENVIRONMENTAL
POLICY ACT TO EPA'S ENVIRONMENTAL
REGULATORY ACTIVITIES

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On April 5, 1972, the Administrator requested the Task Force, composed of the members listed below, to conduct an intensive analysis of the effect on EPA's regulatory programs of complying with the impact statement requirements of the National Environmental Policy Act. This report sets forth the results of the Task Force's analysis.

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I. INTRODUCTION.

The National Environmental Policy Act of 1969 (hereafter referred to as "NEPA") requires all agencies of the Federal Government to prepare, in connection with all major Federal actions significantly affecting the quality of the human environment, a detailed statement on (i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented. Agencies are specifically required to study, develop and describe appropriate alternatives to recommended courses of action for any proposal which involves unresolved conflicts concerning alternative uses of available resources.

The Council on Environmental Quality, in its regulations dated April 23, 1971, concerning implementation of NEPA, exempted from the requirement that environmental impact statements be prepared, environmental protective regulatory activities taken or concurred in by EPA. Operating within those CEQ guidelines, EPA heretofore has not prepared environmental impact statements for its regulatory actions.

However, in the case of Kalur v. Resor the District Court for the District of Columbia ruled that: "There are no exceptions [from NEPA] carved out for those agencies that may be viewed as environmental improvement agencies." Subsequent to the Kalur decision, a number of other regulatory and enforcement actions of EPA have been challenged by industries in the courts on the grounds that environmental impact statements should have been prepared and were not.

On March 9, 1972, the Administrator told a joint meeting of the Senate Committee on Public Works and

Committee on Interior and Insular Affairs that he was initiating a staff study of the potential benefits and possible detrimental effects of requiring that environmental impact statements be prepared in connection with all EPA regulatory programs. This statement was followed by a memorandum, dated April 5, 1972, establishing an intra-agency task force "to examine the effect upon our regulatory programs of a requirement to comply with the impact statement requirements of NEPA." The Task Force was directed to take account of the Administrator's statement to the two Senate Committees. There, he stated EPA must make every effort to comply with the broad purposes of NEPA, which he characterized as requiring Federal agencies (1) to consider the overall environmental effects of their actions, (2) to involve the public in agency decision-making, and (3) to make adequate public explanation of decisions when they are made. The Administrator also indicated that the following factors should be examined in determining whether EPA should prepare environmental impact statements for its regulatory programs:

- the number of actions which are taken under various programs;
- the distinction between major and non-major actions, and between those which do and those which do not have a significant impact upon the quality of the environment;
- the extent to which our programs provide for public disclosure of the rationales for decisions;
- the extent and effectiveness of public participation;
- the degree to which program decisions are made on the basis of an examination of the effects of such decisions upon all aspects of the environment;
- whether statutory deadlines may be incompatible with the deliberative processes involved in developing impact statements; and

--the requirements set forth in judicial decisions for adequate impact statements.

The Task Force, pursuant to this mandate, has conducted an extensive review and analysis of the purposes of NEPA, the manner in which Agency regulatory programs currently are conducted, and how those programs might be affected were the impact statement requirement of NEPA to be applied. Of material significance to our deliberations have been two non-programmatic considerations of general significance, which bear mention at this point. First, we have assumed a strong Agency interest in the continued viability of NEPA policies and procedures as extremely constructive influences on the conduct of the Federal Government. Second, our discussions were overshadowed by the high degree of uncertainty which exists concerning the appropriate interpretation to be given to the impact statement requirements of NEPA. In writing this report, we have not attempted to reach any definitive conclusions concerning the precise requirements of NEPA where such requirements are in doubt, since existing uncertainty, as our analysis will demonstrate, is a major factor in EPA's consideration of this issue, and our views on what the many varying judicial interpretations of NEPA "really mean" cannot be conclusive in resolving the problem with which we are faced.

In any report of this nature, how the analysis is presented is of material importance in shaping the issues. After much consideration, we concluded that a presentation along the following lines would be most appropriate:

- a list of the programs reviewed by the Task Force, and our analysis of the extent to which they involve major Federal actions significantly affecting the environment;
- an analysis of how those programs now operate;
- an analysis of what the substantive and procedural effects upon EPA regulatory programs would be of requiring compliance with the impact statement requirements of NEPA.

II. REGULATORY PROGRAMS CONSIDERED.

The Task Force considered what it judged to be the most important regulatory activities of the Agency, as well as a representative sampling of less important regulatory activities. The substantive and procedural aspects of programs were examined, in terms of how they are conducted now and the extent to which current activities meet substantive and procedural standards that might be imposed by the impact statement requirements of NEPA.

Regulatory actions taken under the Federal Water Pollution Control Act, as amended, were excluded from the Task Force's consideration. Since Section 511(c) of this act, which was added this year by amendment (P.L. 92-500, passed October 18, 1972), specifies the extent of NEPA's application to EPA's regulatory actions in the water area, further examination of the matter seemed inappropriate.

A threshold question to be faced is the extent to which the programs considered involve major Federal actions significantly affecting the quality of the human environment. In addressing this question, regulatory programs were classified into four groups--standard setting, plan approval, quasi-judicial activities, and administrative regulation of individual situations. 1/ For each group, the programs included will be listed, their purposes will be described, and the extent to which they involve major Federal actions significantly affecting the environment will be discussed.

Before beginning, however, it should be noted that well defined standards do not exist for determining which actions require impact statements. Agencies

1/ A fifth class, implementation regulations (such as the mobile source testing and certification regulations) was considered, but these activities were viewed for purposes of this analysis as being incorporated in other classes of regulatory activity.

are required to make judgments as to what actions are major and what environmental effects are significant. A related area of uncertainty, to be discussed at greater length in Chapter IV below is the extent to which impact statements for classes of actions or whole programs suffice to meet the requirements of NEPA, or whether in most or all cases separate statements must be prepared for all individual actions.

A. Standard Setting.

The largest number of regulatory programs are in this category, as the major thrust of Federal pollution abatement legislation has been to require EPA to establish national pollution abatement performance requirements.

The standard setting activities reviewed by the Task Force were as follows:

1. Air--National Ambient Air Quality Standards.

This activity establishes maximum levels of pollutants in the ambient air allowable in order to protect human health (primary standards) and welfare (secondary standards). Primary and secondary standards have been set for six pollutants. It is not known when standards for additional pollutants will be set, although revisions and additions to existing standards will be made, during the next two fiscal years.

2. Air--New Stationary Source Performance Standards.

This activity sets maximum permissible limits on emissions of pollutants from categories of stationary sources which contribute significantly to air pollution causing or contributing to endangerment of public health or welfare. The established limits--i.e. "performance standards"--must be met by all new sources and substantially modified sources within regulated categories. Two groups of categories of stationary sources have been established to date. Performance standards have been promulgated for Group I, which includes steam generators, portland cement plants, incinerators, nitric acid plants and sulfuric acid plants. Group II includes eight categories of sources and Group IIA includes three categories of sources; performance standards for these categories will be proposed shortly. A third group, which includes seven categories of sources, is expected to be proposed in 1973, and about ten more will be proposed in FY 1974. It is not clear how many categories of pollutants will ultimately be regulated by this program.

3. Air--Hazardous Air Pollutants.

This activity involves determining which air pollutants are hazardous--i.e., may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness--and establishing maximum permissible limits for emission of such pollutants from existing and new sources. To date, emission standards for three hazardous pollutants have been proposed. Standards for approximately three additional pollutants are likely to be set by FY 1974. No accurate estimate is available of how many additional pollutants will be designated hazardous.

4. Air--Motor Vehicle Emission Standards.

This program establishes, on an annual basis, maximum permissible limits for emissions from motor vehicles, if such emissions cause or contribute to, or are likely to cause or contribute to, air pollution which endangers the public health or welfare. From one to five standard setting actions are taken per year. With regard to light duty vehicle emission standards for 1975-76, Congress established a minimum acceptable reduction of emissions which the Agency was directed to require.

5. Solid Waste Management Guidelines.

The guidelines govern the solid waste management practices of Federal agencies, and of persons acting under license or permit from such agencies. They also provide guidance as models for State and local governments, and are standards to be met by recipients of grants made under the Solid Waste Disposal Act. Two guidelines are expected to be published in FY 1973, and more are anticipated in subsequent years.

6. Radiation--Guidance to Federal Agencies.

This program recommends guidance for Federal agency activities to the President. If approved by the

President, Federal agencies are expected to comply. Not more than three actions per year are anticipated under this program.

7. Radiation--Generally Applicable Environmental Radiation Standards.

This program establishes standards under the Atomic Energy Act which are binding on AEC licenses. AEC enforces these standards. Not more than two actions per year are anticipated under this program.

B. Plan Approval.

The second group of activities, related to standard setting, involves EPA approval of plans or standards proposed by the States. The Task Force examined one program of this type.

This program was EPA approval of State implementation plans for achieving ambient air quality standards. The discretion of EPA in this area is limited, in that the Agency is required to approve plans which meet certain defined air quality and procedural criteria. Thus, it might be argued that plan approval is essentially an administrative as opposed to a discretionary action, and that consequently no impact statement would be required. On the other hand, at least an information purpose would be served by preparing an impact statement.

In some cases, EPA also promulgates portions of a State's implementation plan. The requirements imposed here are largely within the discretion of EPA. Those proposals that substantively affect the environment may require an impact statement.

C. Quasi-Judicial Activities.

In a few situations, EPA conducts quasi-judicial procedures in order to carry out legislative mandates. These involve requests for suspension of 1975-76 automobile emission standards and actions taken for the purpose of cancellation/suspension of pesticide registrations.

D. Administrative Regulation of Individual Situations.

The pesticides registration and tolerance setting program involves regulation of the sale of pesticide products in interstate commerce and of residues of pesticides on food. The analysis of this activity is based primarily upon our former legislative authority

contained in the Federal Insecticide Fungicide and Rodenticide Act. With respect to registration the new act is essentially the same, with one major exception - pesticides will be classified as for "general use" or "restricted use" in which case conditions of use may be imposed by the Administrator. A typical schedule of regulatory actions with regard to a pesticide could include:

1. Temporary and experimental registration to allow the pesticide to be used initially for limited investigative purposes.

2. Registration of new chemicals to allow general use for certain specified purposes.

3. Tolerance setting, to establish allowable residues in and on foods so that pesticides may be registered for uses which may result in such residues.

4. Registration of new uses, to allow registered chemicals to be used for specified purposes additional to those included in previous registrations. (Tolerance setting for such new uses is also required if a tolerance does not already exist for the specific chemical/crop combination.)

5. Registration of new labels, to allow previously registered pesticide/chemicals for approved uses to be produced or distributed by persons additional to those covered by previous registration.

6. Renewal of registrations, required every five years.

7. Cancellations/suspensions, to remove pesticides from the market because of substantial questions of safety to man and his environment, or for technical or legal reasons.

Of these actions, temporary and experimental registrations, and registration of new labels probably are not major Federal actions significantly affecting the environment. Temporary and experimental registrations involve limited use of pesticides under controlled conditions. Registration of new labels concerns commercial arrangements, but does not allow any new pesticides or new uses of registered pesticides.

Registration of new chemicals or new uses and the attendant tolerance setting action were heretofore treated by the Office of Pesticide Programs as related but independent actions. Since much of the same data and analysis is required for these two actions, and since both must take place more or less concurrently, if the tolerance is not already established, they are in the process of being combined administratively, and will be treated as one action ("registration") for purposes of this analysis. At least in some cases, registration, both of new chemicals and new uses, may be a major Federal action significantly affecting the environment. Consequently, if NEPA were applicable to this program, an environmental assessment might be required in connection with all registration applications for new chemicals and new uses. The criteria governing whether impact statements would be required would include an evaluation of the amount of pesticide likely to be used (which would be based on information concerning the crops for which use was approved and prevalence of target pests) and of the toxicity and health hazards to man and other forms of life, and persistence of the chemicals involved.

III. OPERATIONS OF EPA REGULATORY PROGRAMS.

A first step in analyzing how the Agency's regulatory programs would be affected by a requirement of writing impact statements under NEPA is to review how those programs now operate. Such a review can best be accomplished by, in effect, constructing a matrix in which current practices are reviewed with reference to the substantive and procedural factors which might be considered or required by NEPA. We first will discuss the substantive aspects of program analysis and then turn to procedural considerations.

A. Substantive Factors

The principal substantive factors considered in reaching regulatory decisions are those mentioned in the particular statute involved. Such factors include both environmental and other criteria. Among the environmental criteria different statutes require the Agency to consider in establishing different standards are ambient conditions, judged in terms of protection for human health or welfare, and uses which might be made of the environment, such as attaining water quality sufficiently high to support specified activities. Non-environmental criteria we are required by some statutes to consider include cost and pollution abatement technology.

In reaching regulatory decisions, a range of factors not specifically mentioned by the particular statute involved also might be considered. In the environmental areas, such factors include the pollution effects of various activities on both the media to which the statute is directed and other media. (For example, a technology-based standard regulating air pollution might be considered in terms of both its effects on ambient air quality, and pollution problems created on land or water as a consequence of the need for alternative methods of disposing of waste). Judgements on regulatory actions might also include consideration of other factors, such as land use, aesthetics, energy consumption, resource depletion, cost, and the availability of abatement technology.

General Trends

In reviewing the extent to which the above-listed factors are involved in EPA regulatory decision-making, we recognized three general trends of note. First and perhaps most significantly, with the bringing together of all Federal pollution abatement activities in one agency, there is a definite trend toward consideration of all pollution effects when regulatory decisions are made. This tendency has been strengthened by the creation of the Standards and Regulations Steering Committee (discussed in more detail below) which includes representatives of all major program areas. Through the Committee program administrators responsible for different media have an opportunity to ensure that pollution abatement decisions directed at one media do not create major environmental problems in another.

Secondly, there appears to be a movement toward adoption of technology-based standards. This movement results in large part from the rudimentary state of our knowledge concerning how ambient conditions with regard to air, water and noise are brought into being, and how they can best be regulated and what the effects of various ambient levels are. Thus, rather than attempting to construct extremely complex models in order to put forth a regulatory scheme designed to achieve a specific ambient target, we are directed simply to require target groups to adopt an appropriate high level of pollution abatement technology. The assumption implicit in such programs is that since our understanding of environmental phenomena is far from complete, such technology-based decisions provide the best means of moving toward improved ambient conditions, even though in prescribing the technology to be adopted, we are unable to make accurate predictions as to what those resulting ambient conditions or their effects will be.

Finally, in reviewing Agency decision-making, it seems clear that in connection with most of EPA's regulatory activities, the statute or case law requires us to take into account the economic impact of the proposed actions. In some cases the statute speaks only in terms of achieving ambient goals such as protection of human health. Even here, however, EPA does develop cost estimates and does investigate the relevant technology to understand the effects of the proposed standards.

Program Examples

How these trends evidence themselves and how the above listed factors are considered, can be best appreciated by reviewing the substantive aspect of EPA's decision-making process with respect to specific regulatory programs. For purposes of comparison and analysis, programs can be arrayed along a spectrum, established in terms of statutory criteria, ranging from those based entirely on consideration of technology and cost, through programs requiring an explicit balancing of costs and benefits, to programs in which attainment of a certain ambient condition is the sole statutory target.

New Stationary Source Emission Standards (Air)

A program in which standards are based almost exclusively on technology and cost considerations is establishment of emission standards for new stationary sources. Decision-making here involves two stages, the first of which takes account of ambient air considerations. Under the program, EPA first publishes a list of categories of stationary sources which may contribute significantly to air pollution causing or contributing to endangerment of public health or welfare.

Once the sources categories are listed, EPA must propose and set regulations establishing standards of performance for new sources within each category. A standard of performance is defined as "a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction) the Administrator determines has been adequately demonstrated." In establishing performance standards, analysis focuses almost entirely on the questions of what is the best system of emission reduction, what does it cost, and has it been adequately demonstrated. Alternative emission levels largely reflect the accomplishments of alternative abatement technologies.

In setting new source performance standards, explicit consideration is not given to their predicted impact on ambient air conditions. Indeed, the major premise underlying the program is that standards should be uniform across the Nation, so that polluting industries will be denied any inducement

to locate in clean air regions, where emission standards might otherwise be less strict. 2/ However, in limited cases, control of one pollutant may cause a problem with another air pollutant. When this occurs, the benefits of the control of one pollutant will be weighed against the problems caused with the other pollutant involved.

Similarly, in determining what abatement technology is "best," consideration is given to the pollution effects of such technologies on media other than air. Such consideration, though, generally is limited to reviewing whether such problems are of sufficient magnitude to compromise the air pollution abatement benefits of a technology being considered, as opposed to making a detailed evaluation of what all such non-air pollution problems are. In like fashion, consideration is given to other environmental problems, insofar as they have a reasonably direct relationship on the cost or feasibility of a proposed standard. Thus, in establishing performance standards for fossil-fueled steam generators, much analysis was devoted to the availability of low vs. high sulfur coals, and the consequences of their supply, while less consideration was given to the probable effect on energy supply and the environmental consequences thereof. 3/

2/ Concurrently, however, State implementation plans must provide for location of new stationary sources in a manner that does not cause violation of national primary or secondary ambient air quality standards.

3/ e.g., whether pollution abatement costs would result in increased reliance on nuclear energy.

Pesticides Registration

The pesticides registration program involves a somewhat different mix of environmental and cost considerations. Many pesticides involve some risk of environmental damage, and the decision as to whether or not to register a given use is based on a balancing of these potential dangers against the potential benefits anticipated from the pesticide use. An application for registration requests approval for a specific pattern of pesticide use in order to combat certain identified pests, or for use as a plant regulator, defoliant or desiccant. EPA can approve or disapprove an application. In the latter case, additional data may be required or it may be returned for suggested changes which will be required as a condition to approval. (For example, a lower intensity of use might be required.)

In reviewing applications to register new chemicals or new uses, consideration is given to whether the pesticide is effective for the purposes claimed, to whether use of the pesticide in the manner prescribed leads to undue hazard to the applicator, to the threats which use of the pesticides pose to the environment. In the case of food uses, tolerance setting involves consideration of the health effects of allowing residues of the pesticide on raw agricultural products and other foods. The information considered includes:

(a) a great deal of toxicity data relating to lethal doses of the pesticide on test animals, and to genetic effects;

(b) metabolism testing on animals and vegetation to determine what chemicals the pesticide breaks down into after application;

(c) methods for measuring residues of the pesticide on food; and

(d) environmental issues concerned with factors such as movement of the pesticides and its byproducts, and information on spectrum of pests likely to be affected by the prescribed application of the pesticide.

The Office of Pesticide Programs is in the process of increasing the portion of its resources devoted to analysis of the environmental effects of pesticides, and has been increasing the amount of information on environmental effects which it requires to be submitted. However, the Office has only a limited laboratory capability to do testing beyond verification of information submitted. Moreover, consideration of environmental effects is largely limited to the direct effects of the pesticide in question and of alternative patterns in pesticide use which might result from granting or denying registration. Its review does not extend to environmental effects such as possible shifts in cropping patterns resulting from pesticide registration and the consequences of such changes, nor does it include analysis of the amounts of pesticide likely to be used as a consequence of approving a registration application.

Motor Vehicle Emission Standards

The motor vehicle emission standards program involves a different mix of technology/cost and ambient criteria. The governing statute authorizes EPA to prescribe standards limiting the emission of any air pollutant from new motor vehicles or new motor vehicle engines if such emissions cause or contribute to, or are likely to cause or contribute to, air pollution which endangers the public health or welfare. These standards are to take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period; and the standards apply to the subject vehicles or engines throughout their useful life as defined under the Act. Conceptually, then the program would involve analysis of the contribution motor vehicles make to ambient air pollution which endangers public health and welfare, and of the levels to which motor vehicle emissions should be reduced in order to bring ambient conditions into compliance with national secondary air quality standards. Such analysis would be based on the use of computer models accurately

reflecting the contribution of motor vehicles and other sources to air pollution, and how ambient air conditions would be changed by anticipated reductions in emissions from motor vehicles and other sources. Once a target level for emissions reduction was determined, the next step would be to review available and developing technology in order to establish a schedule for emissions reductions to be met by motor vehicles on a year-by-year basis.

In fact, however, the program has not proceeded in this fashion, because the requisite understanding does not exist of the contribution of motor vehicles to ambient air pollution. Rather, model year levels of emissions limitations have been established on the basis of assessments concerning the cost and capabilities of existing emissions limitation technology. Of course, with regard to the 1975-76 emissions limitations for light duty vehicles, Agency decisions have been governed by the specific statutory directives concerning establishment and waiver of such standards.

Looking beyond the 1975-76 standards, intensive work is underway to develop a satisfactory understanding of the contribution to ambient air pollution made by various classes of motor vehicles, and it is anticipated that standards for years after 1975-76 will be established by reference to air quality models of the type discussed above, as well as with the required degree of regard for cost and technology considerations.

In addition to concern for ambient conditions, establishing motor vehicle emission standards could involve certain trade-offs among air pollutants. If the trade-off was between regulated pollutants--as for example if hydrocarbon and carbon monoxide standards could be met only if nitrogen oxide standards were relaxed--it would be considered explicitly in the standard setting process. However, where byproduct pollutants are not regulated by the program, only limited consideration is given to the problems caused, and they are not discussed formally in the standard setting process.

Motor vehicle emission standards have very limited direct pollution effects on other media, so the issue of how such effects are considered does not arise. However, the standards may have a substantial impact on other environmental areas, such as energy consumption. These impacts are considered and described in the standard setting process only to the degree that they influence the cost or technological feasibility of achieving the emission standards under consideration.

Ambient Air Quality Standards

The program for establishing and achieving national ambient air quality standards provides an example of a program directed solely at an ambient target within fixed time deadlines, but one where consideration can be given by the States to cost and technology in developing implementation plans. The major regulatory steps in the program involve publication of air quality criteria, establishment of national primary and secondary air quality standards, and approval by EPA of State plans to achieve such standards. The statute requires that air quality criteria "shall accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutants in the ambient air, in varying quantities." Criteria have been published for six pollutants. National primary air quality standards are to be set at levels which will protect the health of persons and allow a margin of safety for protection from hazards not yet identified. Secondary standards are set to protect human welfare, which includes protection of plant and animal life, and of property. Moreover, in actual practice, the national primary and secondary standards which have been established were set almost exclusively with reference to available information concerning the adverse effects on health and welfare of regulated air pollutants, and without consideration being given to the cost, technological feasibility, or probable environmental effects (other than on air quality) of prescribing those standards. 4/

4/ Substantial consideration was given to cost and feasibility questions during Congress' consideration of the Clean Air Act of 1970.

Once standards are established, States are required to prepare implementation plans ("SIP") for meeting standards, and EPA must approve those plans. Neither the statute nor the regulations concerning SIP's require that the States consider the pollution problems in other media or other environmental effects of their plans.^{5/} In fact, even if national standards could be met only by creating substantial pollution problems in other media, this would not provide a basis for States not meeting the national standards, or for EPA to reject State plans, so long as the plans did provide for meeting the air quality standards. As concerns cost and technology factors, though, States were encouraged to consider these in developing SIP's.

In reviewing SIP's EPA did not consider directly the pollution of other media or other environmental effects which would result from them. As part of our consideration though an aggregate analysis of plans for meeting the sulfur oxide standards brought out that a shortage of clean--i.e., low sulfur--fuels might exist. This did lead to a comprehensive analysis of fuel availability, which included relatively complete consideration of the pollution and other environmental effects of different fuel strategies.

A further stage in the SIP process is that EPA may prescribe implementation plans, or parts thereof, where State plans are unsatisfactory. Such actions have been based almost entirely on attaining air quality goals utilizing emission limits attainable with reasonably available control technology, with relatively little attention being given to other environmental concerns.

Hazardous Air Pollutant Standards

The program establishing emission limitations for hazardous air pollutants furnishes an example of a statute limiting the factors to be considered by EPA for protection of public health. The first

^{5/}States may prescribe land use and transportation controls, but are not required to consider what the environmental effects of their plans or such controls will be, except with regard to air quality.

step in this program involves a determination by the Administrator that an air pollutant may cause or contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness, and publication of a notice so stating. To date, this has been done for asbestos, beryllium and mercury. Primary criteria for the selection of hazardous air pollutants include:

- a. Relative toxicity to the environment or people;
- b. Persistence in the environment, how long the pollutants remain in the environment;
- c. Distribution in the environment - where the pollutant is found and at what levels; and
- d. What the sources of the pollutant are.

Unless information adduced at a public hearing clearly establishes that a listed pollutant is not hazardous, emission standards must be set that provide "an ample margin of safety" to protect public health. However, while the statute speaks only of public health concerns, the Agency does develop cost and technology information in order to understand the effects of the proposed standards. Both the specific nature of the particular problems caused by each hazardous pollutant and the feasible means of control were examined in great depth. Because the hazardous air pollutants are very different in number and type of sources and control options available, each standard is written in a different manner to optimize effectiveness and facilitate compliance. In many cases, information on possible sources of the hazardous pollutants is not available in sufficient detail to determine the need for emission standards. Investigations are underway to fill these gaps in knowledge, and the results of these investigations may require modification of these standards and inclusion of additional source categories for these pollutants.

Some consideration is also given to pollution problems, both in air and in other media, that are likely to be caused by hazardous pollutant standards. An example of this is asbestos where substitution of mineral wool or fiberglass is anticipated. The

effects of this substitution have not been considered in depth, as the detrimental health effects of asbestos are deemed more significant than the potential problem posed by substitution. Regulation of asbestos also creates a potential solid waste problem. Informal discussions led program officials to conclude that the solution of the problem of removing the asbestos from exhaust gas streams from asbestos mining, milling and manufacturing outweighed the potential adverse solid waste effect, and that the solid waste problem could be handled adequately.

Neither land use nor other aspects of environmental protection are considered in setting the hazardous standards, as protection of the public health from significant adverse effects is viewed as precluding consideration of these factors.

B. Procedural Factors.

There is also a range of procedural factors in terms of which EPA's regulatory processes can be analyzed. The major areas of procedural concern involve the extent of consultation outside the decision-generating office, the form of such consultations, and the extent to which information concerning regulatory decisions is made available.

Among the persons and institutions whose view might be solicited in connection with regulatory decisions are EPA offices other than the one generating the decision, other Federal agencies, regulated industry groups, State and local governments, groups with particular concern for the environment, and the general public. Seeking the points of view of these entities could be accomplished through informal consultation, through formal requests for comments, or through public hearings. Once regulatory decisions are made, persons outside the Agency might be informed only of the decision which has been reached (e.g., a statement of a standard which has been established), or might receive additional information which, at one extreme, would include full information on how all factors in the decision-making process were evaluated, what alternatives were considered, why the Agency's decision was reached, and why opposing points of view were rejected.

Before reviewing the manner in which the above-listed factors are involved in EPA regulatory processes,

note should be made of one particular procedural problem of some significance -- time. Under much of the legislation governing EPA, regulatory activities must be taken within a strict and statutorily mandated set of time constraints. For example, emission standards for hazardous air pollutants must be proposed within 180 days after such pollutants have been listed as hazardous, and Agency review of State implementation plans must be completed within four months of the date such plans are submitted. In other programs, time pressures also present problems, even though legislation does not demand compliance with any particular timetable. For example, delays in approving applications for registration of new pesticides or new uses can delay marketing of a pesticide for an entire crop year. Similarly, delays in cancellation could result in leaving a registered product on the market for a longer period of time.

Analysis of EPA Procedural Practices

Turning to specific programs, there are four general patterns of procedures followed. The first of these is internal decision-making with no formal public involvement, such as takes place in connection with the pesticide registration and tolerance setting program. Registration applications are processed by the office of Pesticide Programs in EPA, with only informal consultation with other EPA offices, and the general public. There is no procedure for soliciting formal comments. The rationale for approving registration applications is set out in writing, but the decision document is neither circulated in EPA nor published outside the Agency. The sole formal information dissemination procedure followed is to publish in the Federal Register a statement of the registration granted and the tolerance established. The new pesticides legislation changes this situation by requiring EPA to publish a notice of an application for registration when it is received, and to publish all data submitted for registration along with the reasons for the decision 30 days after the decision is made.

A second type of procedure is followed with regard to virtually all Agency standard setting activities. This procedure, which is outlined in EPA Order 1000.6, provides for a good deal of participation and information dissemination in the decision-making processes by EPA staff. In general, a work group including representatives of

all EPA offices will be established to develop a standard, with the chairman of the group coming from the office with program responsibility for the standard. This group will develop a work plan, and comment on both the work plan and the standard proposed, through their representatives on the Standards and Regulations Steering Committee. Under OMB procedures, prior to the publication of a proposed standard, a large number of other Federal agencies must be consulted. Thereafter, the standard with a limited amount of explanatory materials, is published in the Federal Register. Additional explanatory material is usually available and the public notice advises as to how it may be obtained. The comments of interested persons are requested at this stage in standards development, and in the case of certain standards, informal consultation with interested groups occurs earlier in the process as well. The full rationale supporting proposed standards, including discussion of alternative proposals and of the main criteria on which choice of one alternative is based, is included in a briefing memorandum for the Administrator, which is reviewed by the intra-agency Steering Committee. Again, after public comment has been received and reviewed, a second decision memorandum, including discussion of responsible opposing points of view, is prepared for Steering Committee review and submitted to the Administrator. When the final regulation is promulgated, in many cases only a summary explanation supporting the regulation has been published. However, in recent cases the Agency has published relatively complete explanations of its regulations at the time of final promulgation, and recent court decisions under the Administrative Procedure Act would appear to require an adequate published explanation of the basis for the final regulation.

Finally, in some instances the Agency follows quasi-judicial procedures in reaching decisions. An example would be the pesticide cancellation procedure. There formal hearings are held, and all interested parties have an opportunity to present their points of view. All such points of view are considered and discussed by the Administrator in formal published decisions issued after the conclusion of such proceedings.

IV. JUDICIAL INTERPRETATION OF THE IMPACT STATEMENT REQUIREMENT.

"[NEPA] is simply a declaration of congressional policy; as such, it would seem not to create any rights or impose any duties of which a court can take cognizance."

--Bucklein v. Volpe, 2 ERC 1082 at 1083
(N.D. Cal. 1970)

"Indeed, the requirement of environmental consideration 'to the fullest extent possible' sets a high standard for the agencies, a standard which must be rigorously enforced by the reviewing courts."

--Calvert Cliffs' Coordinating Committee v. AEC, 2 ERC 1779 at 1782 (D.C. Cir. 1971)

Turning from an analysis of how EPA programs now operate to an examination of what the effects of compliance with the impact statement requirements of NEPA would be, we meet, initially, the problem mentioned in the Introduction -- substantial uncertainty as to what are the impact statement requirements of NEPA.

Since January 1, 1970, when President Nixon signed NEPA into law, an unforeseen and nearly overwhelming mass of litigation of the Act has taken place, with the result that, in a period of time exceedingly short by judicial standards, an entirely new body of law has developed. The quotations above, written less than a year apart, serve to illustrate the speed with which this area of law has grown. It may be said also that, although few Federal courts today would follow the Bucklein view, the inconsistencies between these quotations are emblematic of the uncertainty and ambiguity which attend efforts to interpret the body of case law concerning NEPA. Nevertheless, this report will attempt at least to set forth those issues which appear to be settled, and to delineate as precisely as possible the areas of uncertainty.

A. The Threshold Question--When A Detailed Statement Must Be Prepared.

Section 102 of NEPA requires that, "to the fullest extent possible," a "detailed statement" must be prepared by the "responsible official" on "major Federal

actions significantly affecting the quality of the human environment...." The phrase, "to the fullest extent possible" has been said not to provide an escape hatch for "foot-dragging," but to set a high standard for Federal agencies. 6/ The terms, "major" action and "significantly affecting" are not defined in the statute, and the case law is not clear as to what these terms mean. Although the determination whether or not a detailed statement must be prepared with respect to any given action is committed to the responsible agency, courts have freely reviewed such determinations and reversed them, without, however, providing a settled group of criteria as to how the determinations are to be made. 7/

The April 23, 1971 guidelines of the Council on Environmental Quality concerning implementation of NEPA define "actions" to include "policy, regulations, and procedure-making." The Senate Committee Report on Section 102 indicates that regulations and "policy statements" are major actions. 8/ There can be little doubt that EPA's standard setting actions have a significant impact upon the quality of the environment. However, in those cases where there are no significant adverse secondary effects, and the only significant environmental effect of the standard setting action is to reduce pollution, it may be that NEPA would not require an impact statement, since NEPA would appear to be directed towards the minimization of adverse environmental effects of government actions. Further, with regard to actions directed at individual situations, such as pesticide registrations, the case law provides little guidance concerning the exact criteria that would determine whether an impact statement would be required.

In some situations, such as approval of a State implementation plan under the Clean Air Act, the Agency is required under the applicable statute to take action if specified conditions are met. A few opinions have implied that impact statements might not be required in such

6/ Calvert Cliffs' Coordinating Committee v. AEC, 2 ERC 1779 1782 (D.C. Cir., 1971).

7/ See, e.g. Scherr v. Volpe, 2 ERC 1588 (W.D. Wis. 1971); NRDC v. Grant, 3 ERC 1883, 1890 (E.D. N.C. 1972).

8/ S. Rept. No. 91-296, 91st Cong., 1st Sess. at 20 (1969).

situations. 9/ However, courts also have held that the mere fact that an alternative was not within an agency's authority to implement does not relieve that agency from the duty to consider that alternative in a detailed statement, 10/ and that preparation of an impact statement was required with respect to an action, even though the agency might be acting improperly if it adopted any alternative other than that which it actually chose. 11/ Accordingly, while the question whether the law requires detailed statements for mandatory actions such as approval of State implementation plans remains in doubt, the possibility that an impact statement would be required in connection with such actions cannot be discounted.

A related question is whether impact statements must be prepared in connection with quasi-judicial proceedings dealing with issues such as requests for suspension of automobile emission standards or review of proposed cancellation of pesticides registrations. Such proceedings are not instituted by EPA; they are initiated by persons outside the Agency challenging an EPA action. Thus, it could be argued that a requirement that an impact statement be prepared is inapplicable, since EPA is in the role of respondent (or judge), rather than initiator of the action. Further support of this position could be garnered from the fact that burden of proof lies on the challenger, and that if EPA were required to prepare an impact statement, this burden would be shifted. To the contrary, however, it could be argued that EPA in all instances, including decisions on whether and how to respond to such challenges, is required to consider the effects on the environment of its actions and that preparation of an impact statement would be appropriate. In the analogous situation posed by licensing proceedings conducted by the AEC and the FPC,

9/ Cf. Ely v. Velde 3 ERC 1281 (4th Cir. 1971); Getty Oil v. Ruckelshaus, 4 ERC 1141 (D. Del. 1972). Dicta in Calvert Cliffs imply that §102 procedures need not be followed in cases of clear conflict of statutory authority. 3 ERC 1779 at 1782. See also §103 of NEPA, which recognizes that in some cases "present statutory authority" of Federal agencies may "prohibit full compliance with the...provisions of this Act."

10/ NRDC v. Morton, 3 ERC 1558, 1561-62 (D.C. Cir 1972). However, alternatives need not be considered unless they are "reasonably available." Id. at 1562.

11/ City of New York v. United States, 3 ERC 1570, 1576 (E.D. N.Y. 1972).

the courts have held that impact statements are required.^{12/} Thus, again we find lack of certainty as to what NEPA requires.

Even if an action is "major" and has a significant effect upon the environment, the question has been raised whether carrying out NEPA's purposes, without preparing an environmental impact statement, would satisfy the Act. A few early cases held that the fact that a "detailed statement" has not been prepared under NEPA was not prejudicial, and would be excused because there had been substantial compliance with NEPA, or compliance "to the fullest extent possible."^{13/} All of these were transition cases, in which NEPA was enacted after the Federal Government had completed much of the action which it planned to take upon the project, or where Agency guidelines implementing NEPA were not available to the local decision-maker when the action was taken.^{14/} In a recent case involving the Soil Conservation Service in the Department of Agriculture, however, the Department argued that a detailed statement under NEPA was not required because a statement (not a "detailed statement") had been prepared and circulated, environmental impacts had been considered and weighed against the benefits, alternatives to the action had been considered and some had been adopted, and adequate public participation and consultation with other agencies had been provided. The court rejected this contention, holding that NEPA's procedures must be followed, and citing Calvert Cliffs': "...the Section 102 duties are not inherently flexible."^{15/} Accordingly, if courts hold section 102 of NEPA to apply to EPA and if it is concluded that EPA should adopt a policy of "substantial compliance" with NEPA, without the preparation of formal impact statements, this alternative would require new legislation.

^{12/} Calvert Cliffs' Coordinating Committee v. AEC, 2 ERC 1779 (D.C. Cir. 1971); Greene County Planning Board v. FPC, 3 ERC 1959 (2d Cir. 1972).

^{13/} See, e.g., Sierra Club v. Hardin, 2 ERC 1385, 1402-04 (D. Alas. 1971).

^{14/} Daly v. Volpe, 2 ERC 1506 (W.D. Wash. 1971).

^{15/} NRDC v. Grant, 3 ERC 1883, 1890 (E.D. N.C. 1972).

B. Contents of an Impact Statement.

Once the decision has been made that an impact statement should be prepared, the question becomes what should be included in that statement. Section 102(2)(C) of NEPA requires the statement to discuss:

- "(i) the environmental impact of the proposed action,
- "(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
- "(iii) alternatives to the proposed action,
- "(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
- "(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented."

To personnel of EPA, working with and consequently highly sensitive to environmental concerns, the range of factors which might be considered to fall within "the environmental impact" and the "adverse environmental effects" of a proposed action are wide indeed. Yet, as the above discussion of current program operations indicates, the extent to which environmental impacts of proposed Agency actions are considered is sometimes quite limited. In some cases, such as emission standards, even the impact of a standard on its target medium is not evaluated, while secondary pollution problems now are considered, in a limited way, only within the context of their impact on what is "practicable" or what the "cost" of a proposed action will be, and other environmental impacts, such as land use or changing patterns of resource consumption, rarely are considered at all.

Much of the case law in this area involves agency claims that no impact statement is required in a given situation. Moreover, most of those cases that do deal directly with the adequacy of a statement involve specific projects or activities, rather than standard setting actions. As a result, the relevance of the criteria set forth in such decisions to many EPA regulatory activities often is not clear. Consequently, and particularly with regard to EPA's standard setting programs, there is considerable uncertainty regarding the extent to which environmental

impacts would have to be examined, the length of discussion and the amount of detail required in the statement, the degree of remoteness of effects which would have to be set forth, the number of alternatives which would have to be examined, and the extent to which the environmental effects of those alternatives would have to be analyzed.

The most frequently cited test for the adequacy of the disclosure of environmental impacts in a detailed statement is that contained in EDF v. Corps of Engineers. 16/ In that case, the court held that a detailed statement must set forth all possible environmental impacts which are known to the preparing agency or which are brought to its attention by others. This would include views as to possible impacts which are without merit in the agency's view, and the agency's opinion on all viewpoints. A later case only required that all responsible scientific opinion as to possible adverse effects be set forth. 17/

CEQ's guidelines of April 23, 1971, require consideration of both "primary and secondary significant consequences for the environment.... For example, the implications, if any, of the action for population distribution or concentration should be estimated and an assessment made of the effect of any possible change in population patterns upon the resource base, including land use, water, and public service, of the area in question." 18/ This advice, while helpful, clearly is not dispositive.

One court has required a detailed statement for railroad abandonment proceedings of the ICC, because the abandonment of the service would cause an increase in truck traffic, and an associated increase in air pollutant emissions. 19/ Although the issue was not resolved by the court's opinion, plaintiffs in

16/ 2 ERC 1260 (E.D. Ark. 1971).

17/ Committee for Nuclear Responsibility v. Seaborg, 3 ERC 1126, 1129 (D.C. Cir. 1971).

18/ Guidelines - Statement on Proposed Federal Actions Affecting the Environment, §6(a)(ii), 36 F.R. 7724, 7725 (1971).

19/ City of New York v. United States, 3 ERC 1570 (E.D. N.Y. 1972).

Sierra Club v. Sargent^{20/} have argued that a detailed statement prepared for a discharge permit for a refinery would be required to include consideration of the land use consequences of the location of a refinery at a particular point, and the effects of oil spills from tankers which would serve the refinery.

Perhaps the most important case dealing with the relationship of NEPA to an agency's decision-making processes is Calvert Cliffs' Coordinating Committee v. AEC.^{21/} In an earlier decision, handed down before the enactment of NEPA, the First Circuit sustained an AEC argument that the Atomic Energy Act did not permit water quality standards to be considered in the licensing of nuclear power plants--that decisions must be based on radiation standards alone.^{22/} In Calvert Cliffs', however, the court interpreted NEPA to require not only that the AEC take water quality into account, but also that that agency was not entitled to rely exclusively on State certification, but was required to make an independent evaluation of water quality effects and to balance these, with other risks and benefits involved, in the decision whether or not to issue a license. Applying the reasoning of Calvert Cliffs' to EPA, one could conclude that when a regulatory decision is made with regard to one medium, the impacts of that decision on other media must be considered, and the fact that such impacts do not violate environmental protection standards applicable to such other media does not excuse the Agency from making a full evaluation of those impacts.

In addition to discussing the environmental impact of proposed actions §102(2)(C)(iii) of NEPA requires that agencies consider alternatives to the proposed action. Moreover, Section 102(2)(D) directs agencies to "study, develop and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." This provision would seem to require, at a minimum, that where an EPA decision directed

^{20/3} ERC 1905 (W.D. Wash. 1972).

^{21/2} ERC 1779 (D.C. Cir. 1971).

^{22/} New Hampshire v. AEC, 1 ERC 1053 (1st Cir. 1969).

at one medium causes pollution problems in other media, alternatives would have to be considered in order to obtain the optimal balance between all pollution effects.

A critical question here is whether an agency need consider alternatives not within its power to effectuate, such as those requiring new legislation or action by the President. The holding in Getty Oil v. Ruckelshaus^{23/} that an impact statement need be prepared only where the agency was considering alternatives open to it under the relevant statute would appear to preclude, where detailed statements are required, the consideration of alternatives outside the agency's statutory authority.

The leading case on scope of alternatives, however, is NRDC v. Morton^{24/} where the government argued that an impact statement for offshore oil leases need only consider alternatives within the Department of Interior's power to effectuate, and not such alternatives as would require new legislation or action by the President. The court held that the impact statement did not meet the requirements of NEPA, and stated that "The mere fact that an alternative requires legislative implementation does not automatically establish it as beyond the domain of what is required for discussion, particularly since NEPA was intended to provide a basis for consideration and choice by the decision-makers in the legislative as well as the executive branch."

The seeming inconsistency of this approach with the Getty Oil case may be explained by reference to the court's rationale for requiring the consideration of alternatives beyond the Department's authority. The court distinguished the granting of leases for offshore oil wells from projects such as canals and dams on the grounds that these were not national problems, requiring the efforts of several agencies to resolve. Since the oil leases were an "integral part of a coordinated plan to deal with a broad problem"^{25/} and were undertaken pursuant to the

^{23/4} ERC 1141 (D. Del. 1972).

^{24/3} ERC 1558 (D.C. Cir. 1972).

^{25/}Id.

directive of the President in his Message on Clean Energy, the scope of the alternatives which must be considered was thereby broadened. The essential point of the opinion is that a broad national problem requires the consideration of a wide range of alternatives for its solution. While the court implied that these alternatives could have been more properly considered and spelled out in a detailed statement by the actual decision-makers at the White House level, they must be considered at some stage in the implementation of the overall plan.

Reading NRDC v. Morton in context, then, it would appear that the scope of alternatives to be considered must be tailored to the specific situation, and to the legislation in question. There is no blanket requirement for an agency to consider alternatives beyond its authority. This requirement has been obtained only where a national problem required a coordinated approach by several Federal agencies.

Finally, we come to the question of the impact of NEPA on agency decision-making. The relevant statutory provision is section 101(b) of NEPA. which requires Federal agencies to use

"all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may--

* * *

- (2) assure for all Americans safe, beautiful, productive, and aesthetically and culturally pleasing surroundings;
- (3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences."

In Calvert Cliffs', the court interpreted this section to mean that

"The reviewing courts probably cannot reverse a substantive decision on its merits, under Section 101, unless it be shown that the

actual balance of costs and benefits that was struck was arbitrary or clearly gave insufficient weight to environmental values."^{26/}

Despite its reading of Section 101, however, it seems clear that the court in Calvert Cliffs' has given Section 102 a considerable substantive impact. The court emphasized that NEPA's requirement that a detailed statement must be prepared means that the environmental factors are required to be considered: "What possible purpose," the court asked, "could there be in requiring the 'detailed statement' to be before hearing boards, if the boards are free to ignore entirely the contents of the statement?" ^{27/}

Additionally, Calvert Cliffs' is most often cited for its requirement that the economic and technical benefits of a proposed project be balanced against the environmental costs, and that this process be recorded in the detailed statement. If such a statement must be "considered" by the agency, then the factors which are considered and balanced necessarily affect the agency's substantive decision.

The balancing procedure required by Calvert Cliffs' was clearly designed for agencies, such as the Atomic Energy Commission, the Federal Highway Administration, and the Corps of Engineers, which did not originally include environmental considerations in their decision-making processes, but were development-oriented. What then, of the Environmental Protection Agency which has broad responsibilities for the protection of the environment? Must it balance the economic and technical benefits of its decisions against the environmental costs?

At first impression, the requirement seems inapplicable. EPA's decisions are not generally thought to be oriented toward creating economic or technical benefits and in most cases, the question is how to maximize environmental benefits rather than how to minimize environmental costs. If,

^{26/2} ERC at 1783. See also Conservation Council v. Froehlke, 3 ERC 1687 (M.D. N.C. 1972) aff'd 4 ERC 1044 (4th Cir. 1972); United States v. 247.34 Acres, 3 ERC 1098 (S.D. Ohio 1971); EDF v. Corps of Engineers, 4 ERC 1097 (E.D. Ark. 1972).

^{27/2} ERC at 1784.

however, the Calvert Cliffs' formulation is treated as requiring a balancing of environmental and other considerations in all instances, without distinction as a result of different program goals, it could be applicable to EPA's programs, and require a balancing of economic and technical costs against environmental benefits.

The court in Kalur v. Resor^{28/} evidently considered the balancing requirements set forth in Calvert Cliffs' to be fully applicable to agencies which might be designated as "environmental improvement agencies," although Judge Robinson indicated in a footnote that he doubted that the Corps of Engineers would qualify for inclusion in this category. Whether cost-benefit analysis, along with other NEPA requirements will be applied to EPA will be more clearly resolved by the decision in Appalachian Power Co. v. EPA^{29/}, which is now pending in the Court of Appeals for the District of Columbia. This case involves a challenge to EPA's promulgation of new stationary source performance standards for steam generators. Petitioners, in their brief, allege not only that a detailed statement was required for these standards, but also that

"It is by no means an undue extension of the broad language and basic purposes of NEPA to require consideration of the environmental impact of a major Federal action that may have the effect of limiting the availability of electricity to the public. Undoubtedly electric power plays a major role in assuring 'for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings,' in contributing to 'high standards of living and a wide sharing of life's amenities,' and in facilitating 'the maximum attainable recycling of depletable resources.'"^{30/}

^{28/3} ERC 1458, 1467 (D.D.C. 1971).

^{29/}Docket No. 72-1079.

^{30/}Brief for Petitioners, Appalachian Power Co. v. EPA, 29.

Thus, NEPA requires consideration, it is argued, of economic and social effects as well as environmental effects. This argument was put more explicitly by the brief of amici curiae in the same action:

"...Ignoring the NEPA balancing requirements may lead EPA to establish suboptimal standards for emissions. Neither overly lenient nor overly stringent standards are in the public interest.

There can be no question of the need for a cost-benefit analysis for each regulation being challenged before this court. These three new source standards will require the investment of billions of dollars over the next decade...."^{31/}

While the Task Force has found that the economic and social costs of regulatory actions are almost always considered to some extent they often are not balanced explicitly against the benefits to result from the proposed action. Moreover, although strong arguments can be made that courts should not apply to EPA the cost-benefit balancing requirement set forth in Calvert Cliffs', particularly where a later-enacted statute requires action solely on the basis of public health or economic feasibility, there is a very real possibility that the courts may apply this test to EPA.

The one theme that runs consistently through all judicial discussion of what substantive analysis is required by NEPA is that of reasonableness. One court formulated a test for completeness of discussion in the following terms:

"We reiterate that the discussion of environmental effects of alternatives need not be exhaustive. What is required is information sufficient to permit a reasoned choice of alternatives so far as environmental aspects are concerned."^{32/}

Elsewhere in the same opinion, the court points out that "A rule of reason is implicit in this aspect of the law" ^{33/} and that

^{31/}Brief for Amici Curiae, Appalachian Power Co. v. EPA, at 27-28.

^{32/}NRDC v. Morton, 3 ERC 1558, 1563 (D.C. Cir 1972).

^{33/}Id. at 1561.

[NEPA] must be construed in the light of reason if it is not to demand what is, fairly speaking, not meaningfully possible, given the obvious, that the resources of energy and research--and time available to meet the Nation's needs are not infinite."^{34/}

Another court upheld a detailed statement which dismissed ten alternatives in seven pages.^{35/} The court concluded that practical reasons had been given for rejecting these alternatives (to the New Hope Dam project) and that further discussion of each alternative would be "a useless act." In Committee for Nuclear Responsibility v. Seaborg, ^{36/} the court said that the agency's complete analysis of alternatives need not be set forth in the detailed statement, and that "all that is required is a meaningful reference that identifies the problem at hand for the responsible official."

In concluding this section then, it seems clear that the courts tend to follow a "rule of reason" as to what must be included in an environmental impact statement. However, reasonableness is a rule of only limited operational and predictive utility. Moreover, what the courts deem to be reasonable sometimes may seem unreasonable from an administrative standpoint. In the long run, some consensus will undoubtedly emerge as to what is required of EPA if it must comply with NEPA; but this consensus may require several years of litigation during which considerable uncertainty will surround our regulatory actions.

C. Procedural Questions.

NEPA requires, not only that an environmental impact statement be prepared, but also that certain procedures be followed. First, before preparing a statement, an agency is required to "consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved." These comments, and the comments of "State and local agencies" are required to be made available to the President, CEQ, and the public. Finally, NEPA requires the final statement to "accompany the proposal through the existing agency review processes."

^{34/}Id. at 1564.

^{35/}Conservation Council v. Froehlke, 3 ERC 1687, 1690.

^{36/}3 ERC 1126, 1129 (D.C. Cir. 1971).

The interagency consultation requirements are generally met by preparing a draft environmental statement, circulating that statement for comment to a number of Federal, State, and local agencies, and preparing the final statement on the basis of comments received. The comments are included as an attachment to the final statement. Although CEQ's guidelines of April 23, 1971, require, in most cases, 30 days for inter-agency review, the guidelines recognize that this time may be shortened for "emergency circumstances," or where compliance would not be practicable. 37/

The requirement that the detailed statement "accompany the proposal through the existing agency review processes" has been held to require the consideration of environmental values "at every distinctive and comprehensive stage of the process..." 38/ The leading case construing this provision is Greene County Planning Board v. FPC. 39/ There, the FPC argued that it would be acceptable for it to prepare its final detailed statement after the hearings on a proposal, but before rendering a decision on that proposal. The court ordered the FPC to prepare a final detailed statement prior to holding hearings on a proposal, because the statement would "go to waste" unless subjected to the full scrutiny of the hearing process. Thus, although it is still unclear what are the "distinctive and comprehensive states" in which detailed statements must be considered, and before which such statements must be prepared in final form, Greene County requires at a minimum the preparation of a final detailed statement prior to agency hearings on a proposal.

It is uncertain whether and how the Greene County rule would be applied to rule-making proceedings, such as the promulgation of most EPA standards and regulations. The court's primary concern in Greene County was that there was no staff assessment of environmental impact prior to the agency review process, but rather only a self-serving statement prepared by the company. This problem might be overcome by a procedure whereby the EPA staff would prepare a draft impact statement to be published with a notice of proposed rule-making,

37/ CEQ Guidelines, §§10(b), 10(d).

38/ Calvert Cliffs' Coordinating Committee v. AEC,
2 ERC 1779, 1785 (D.C. Cir. 1971).

39/ 3 ERC 1595 (2d Cir. 1972).

and would then prepare a final statement to be released prior to promulgation of the final regulation. This procedure is generally followed throughout the Executive Branch for rule-making procedures, and has not been challenged by environmentalists or others in this context.⁴⁰

However, Greene County rested on the statutory requirement in NEPA that the final statement accompany the proposal through the "existing agency review processes." For purposes of this requirement it could be argued that, a notice of proposed rule-making is a "proposal" and that the agency review of comments on that notice constitutes the "existing agency review processes." This could lead to interpreting NEPA as requiring publication of the final statement at the time the notice of proposed rule-making is published. If the courts so hold, there could be serious disruption of the EPA standard setting process, especially in those cases where EPA is held to a tight statutory deadline for publication of proposed regulations.

D. Timing Factors and Delays.

The Clean Air Act, now administered by EPA, contains strict deadlines for action by the Administrator. The question has arisen whether it would be possible to comply with NEPA's procedural requirements, and at the same time to adhere to these deadlines. This problem could be exacerbated by strict application of Calvert Cliffs' requirement that the NEPA statement accompany a proposal through "every distinctive and comprehensive stage" in EPA's decision-making process, or of Greene County's requirement that the public, final detailed statement precede not only the action in question, but hearings held prior to the action. Finally, a recent decision, if followed by other courts, reads into NEPA not only the statutory requirement that a Federal agency "consult with and obtain the comments of" other Federal agencies with respect to the impact involved, but also the further requirement of the

⁴⁰/The question arises whether this procedure would satisfy NEPA's requirement that an impact statement "accompany the proposal through the existing agency review processes." One legal theory to support this procedure would be that the publication of a notice of proposed rule-making only sets forth a proposal. It is that "proposal," then, which must be accompanied by a NEPA statement through agency review prior to promulgation.

CEQ guidelines of April 23, 1971, that this be accomplished by circulation of an actual draft impact statement. 41/

Several possible solutions to these difficulties have been suggested. Representatives of conservation organizations, as well as counsel for amici curiae in Appalachian Power Co. v. EPA have suggested that EPA provide special time schedules or administrative mechanisms to achieve good-faith compliance to the fullest extent possible. 42/ An attorney for the Sierra Club has suggested that NEPA allows something less than "a full NEPA review" in emergency situations. 43/

These proposals have never been tested in the courts. In both the Calvert Cliffs' case, and the "Quad Cities" decision, the court was dealing with a refusal to prepare a detailed statement at all, rather than the preparation of an abbreviated statement. A hint that circumstances dictate the degree of thoroughness of review may be found in NRDC v. Morton where the court stated:

... Mere administrative difficulty does not interpose such flexibility into the requirements of NEPA as to undercut the duty of compliance "to the fullest extent possible." But if this requirement is not rubber, neither is it iron. The statute must be construed in the light of reason if it is not to demand what is, fairly speaking, not meaningfully possible, given the obvious that the resources of energy and research--and time--available to meet the Nation's needs are not infinite. 44/

Support for the view that an abbreviated review could be appropriate in the context of such legislation as the Clean Air Act may also be found in the

41/ NRDC v. Morton, 3 ERC 1623, 1624-25 (D.D.C. 1972).

42/ Brief for Amici Curiae at 35-36.

43/ e.g., Statement of Anthony Z. Roisman on behalf of the Sierra Club, Hearings on NEPA before Senate Committees on Interior and Insular Affairs and Public Works, 92d Cong., 2d session, #92-H32 at 478-79 (1972).

44/ 3 ERC 1558 at 1564.

familiar canon of statutory construction whereby, if two statutes are apparently in conflict, they are to be interpreted, if possible, in such a manner as to be consistent with each other.^{45/} In this case, the statutory requirements of the Clean Air Act could be said to require that the phrase, "to the fullest extent possible," be interpreted to mean, "to the fullest extent possible within 60 days," or within whatever deadlines are set forth.

One court upheld an action of the Price Commission, even though the action was major and significant, and no NEPA statement was prepared.^{46/} The decision was based on legislative history indicating that expeditious action was essential to the achievement of the program, and on the court's view that the emergency situation in question could justify some level of consideration of NEPA's policies falling far short of that required for a full "detailed statement." In general, however, where agencies have sought to justify non-compliance with NEPA on the grounds of emergency circumstances, the courts have rejected the argument. The following quotation from the Greene County case is typical:

"Fully recognizing that delay unfortunately is incident to our mandate and PASNY's claim that the Blenheim-Gilboa project is a vitally needed power facility, we can only add our voice to that of the District of Columbia Circuit in Calvert Cliffs: Delay is a concomitant of the implementation of the procedures prescribed by NEPA, and the spectre of a power crisis "must not be used to create a blackout of environmental consideration in the agency review process."^{47/}

^{45/} See Ely v. Velde, 3 ERC 1280 (4th Cir. 1971).

^{46/} Cohen v. Price Commission, 3 ERC 1548 (S.D. N.Y. 1972).

^{47/} Greene County Planning Board v. FPC, 3 ERC 1595, 1601 (2d Cir. 1972). See also Izaak Walton League v. Schlesinger, 3 ERC 1453 (D.D.C. 1971).

E. Preparation of Detailed Statements by Applicants.

In an important EPA program, the Pesticides Registration Program, applicants are presently required to supply considerable quantities of data with their applications. Other agencies, such as the Atomic Energy Commission and the Federal Power Commission, faced with the problem of preparing detailed statements under such regulatory programs, require applicants to supply an "environmental statement," which then forms the basis for the agency's own detailed statement. Although the Greene County case certainly stands for the proposition that an agency may not simply rubber-stamp an applicant's draft, and circulate it as the agency's own detailed statement, the court did not disallow the basic procedure, and even approved the circulation of the applicant's draft as a means of satisfying NEPA's consultation requirements.^{48/} It seems clear that, for these programs, much of the investigatory work necessary for the preparation of detailed statements may be delegated to applicants. What is not clear is the extent of review, independent investigation, and modification which the agency must undertake after receipt of the applicant's draft.

F. Multiple-Action Statements.

Pesticides registration involves a large number of individual actions which may be classifiable into sub-categories of actions. In addition, such program efforts as the approval of State air implementation plans lend themselves to treatment as a single group of related actions, where the major issues may be examined collectively. The administrative difficulties attendant upon preparation of large numbers of detailed statements may be reduced by the preparation of fewer statements dealing with the issues relating to each class or category of actions. Under such a procedure, detailed statements of a more limited scope would then be prepared for individual actions under the program only where such actions were major actions significantly affecting the quality of the environment, and where substantial issues arose which had not been adequately treated in the multiple-action statement.

^{48/} Greene County, supra, at 1501.

Although the court in NRDC v. Morton required the Department of Interior to consider issues which it had refused to consider in its detailed statement, the court did not object to the fact that the statement dealt with leases for 80 tracts of offshore oil lease acreage. EPA has prepared a single detailed statement covering grants for over 40 separate waste treatment projects in the Long Island area. The Department of the Interior has prepared a "program impact statement" for its proposed geothermal steam leasing program. Finally, CEQ has recommended the preparation of multiple-action statements where appropriate.49/

G. Confidentiality.

18 U.S.C. §1905 prohibits Federal officials from disclosing information coming to them in the course of employment which relates to trade secrets, processes, operations, and other categories of data. Pesticides manufacturers frequently claim confidentiality under 18 U.S.C. §1905 for information included in registration applications. Thus, this provision of law may preclude divulging such information to the public in detailed statements under NEPA.

Two approaches suggest themselves for dealing with problems under this statute. First, a multiple-action statement, or a number of such statements, could be prepared for the pesticides registration program, or for classes of pesticides registered under that program. These statements would not discuss the precise formulations of pesticides where there were trade secrets, but could discuss generally the effects of, e.g., pesticides formulated from chlorinated hydrocarbons.

Whether or not the first approach were adopted, detailed statements might nevertheless be required for some individual pesticides. In these cases, the statement could be prepared and circulated to other agencies on a confidential basis, but not made public. If some or most of the relevant issues could be discussed meaningfully without reference to confidential

49/ Memorandum to Federal agency impact statement liaison offices from Timothy Atkeson, 3 ER Current Developments 82, 87 (1972).

information, an expurgated statement could be prepared for release to the public. This procedure would closely parallel procedures now followed, with CEQ's concurrence, by the Atomic Energy Commission and the Department of Defense with respect to detailed statements containing classified information.

H. Standing and Judicial Review.

A question of considerable complexity involves determining what class of persons has the legal right to petition a court for review of an agency action; who, in other words has standing. In the environmental area, this is sometimes particularly difficult to determine, since the customary test--whether there has been injury in fact--is not as evident where environmental values, as opposed to economic or social ones, are concerned. For the purposes of this report, it is important to assess whether application of NEPA's procedures to the Agency's environmental regulatory programs would enlarge the class of persons who could challenge EPA's actions in court, and whether the opportunities for such challenges would increase.

The basic test enunciated by the Supreme Court accords standing to individuals alleging that the challenged action would cause them "injury in fact" and where the alleged injury would be to an interest "arguably within the zone of interests to be protected or regulated" by the relevant statutes.^{50/} More recently, in Sierra Club v. Morton^{51/} the Court rejected the Sierra Club's claim that its longstanding concern with and expertise in the use of natural resources were sufficient to give it standing as a representative of the public. However, the Court was careful to note that nothing would preclude the Sierra Club from representing injured members, and even implied, in a footnote, that it would have been sufficient for the Sierra Club to have alleged that it conducted regular camping trips into the Mineral King area, and that the club members used the area for recreational purposes. It

^{50/}Association of Data Processing Service Organizations v. Camp, 397 U.S. 150 (1970).

^{51/}2 ERC 2039 (Sup. Ct. 1972).

is common for environmental groups to sue on behalf of affected members. Some environmentalists have been permitted to sue as individuals on their own behalf, on the basis of allegations that they used a river for canoeing, for example.

Sierra Club v. Morton, it must be noted, was decided on the basis of §10 of the Administrative Procedure Act,^{52/} which confers standing to challenge agency actions where standing is not controlled by specific statutes. Accordingly, the requirements set forth in that case would be applicable to actions brought under NEPA, and under EPA laws not specifically dealing with standing. However, it is expected that standing under EPA statutes may become increasingly liberal if certain key legislation containing provisions similar to §304 of the Clean Air Act is enacted.

Section 304 of the Clean Air Act authorizes "any person" to bring an action challenging the Administrator's failure to perform a non-discretionary act or duty under that Act. While this broad grant of standing would not operate to allow unaffected individuals to sue only on the basis of failure to prepare an adequate impact statement, the issue of non-compliance with NEPA may be raised by any person alleging some failure of the Administrator to perform a mandatory duty under the Clean Air Act, and might in practical effect enlarge standing to challenge EPA's failure to prepare adequate impact statements beyond that provided by §10 of the Administrative Procedure Act.

NEPA does nothing to change the existing requirement that a party be adversely affected by a decision in order to challenge it. Although NEPA's broad environmental policies could be invoked to broaden the "zone of interests"^{53/} affected, it is difficult to see that this would affect standing under the statutes administered by EPA, which are essentially intended to protect the quality of the environment. We conclude, then, that the application of NEPA's procedures to EPA would probably not enlarge the class of persons eligible to challenge Agency actions.

^{52/}5 U.S.C. §702 (1970).

^{53/}Association of Data Processing Service Organizations v. Camp, 397 U.S. 150 (1970).

In some cases, however, the classes or types of actions which may be challenged may be increased. For example, under FIFRA, courts have held that refusal to register a product is not a "final" action as required by the statute, and that the plaintiff is required to exhaust administrative remedies before seeking judicial review.^{54/} It is conceivable that, under NEPA, such an action could be challenged, not in itself, but on the grounds of failure to file an impact statement, or of alleged inadequacies in a statement which has been prepared. This would not, however, have any substantial effect, since review in such cases may always be obtained under existing procedures simply by exhausting the administrative remedies through calling for a public hearing or for advisory committee consideration.

It may be generally concluded then, that the application of NEPA to EPA's regulatory programs would have no effect, or a negligible effect, upon the number or class of persons who would be eligible to challenge EPA's actions, or upon the number of different classes or categories of actions which could be challenged. However, the impact statement requirement would increase, with respect to each action taken by EPA, the number of points which could be challenged, and the scope of review. For example, agency actions under applicable review doctrines have ordinarily been upheld unless shown to be arbitrary and capricious.^{55/} Even though recent cases have indicated that the courts will require a more detailed explanation than previously prepared of the rationale for agency decisions,^{56/} review is still limited to the propriety of the decision under the applicable substantive statute.

NEPA would introduce a series of new elements. The decision made by EPA would be reviewable under the applicable statute, as before. In addition, courts would review the Agency's determination whether or not an impact statement under NEPA was

^{54/} "Comparison," supra, at 2.

^{55/} 5 U.S.C. §706 (1970)

^{56/} EDF v. Ruckelshaus, 2 ERC 1114, 1122 (D.C. Cir 1971).
Kennecott Copper v. EPA, 3 ERC 1682 (D.C. Cir. 1972).

required in a given instance, the adequacy of the statement itself, and whether the Agency had considered the contents of the impact statement throughout the decision-making process. In effect, NEPA would require a series of actions ancillary to any given action. Each such action would be subject to judicial review.

V. EFFECTS OF NEPA PROCEDURES UPON EPA PROGRAMS.

As has earlier been pointed out, there is considerable uncertainty with respect to what NEPA actually requires. Nonetheless, in this chapter we will outline how complying with the impact statement requirements of NEPA will affect EPA regulatory activities. Where the cases interpreting those requirements are not consistent, we will estimate the range of probable effects, based on the narrowest and broadest reasonable interpretations of NEPA requirements.

While the probable effects of compliance with NEPA can best be understood by examining specific representative programs, several general comments may be made. First, in the course of our consideration of the problem, it has become clear that compliance with NEPA could involve a substantial shift in the conceptual basis of the program operations. While EPA was created in part to promote agency decision-making based on multi-media environmental considerations, such an overview of the range of environmental problems is present more in EPA's policy planning than its operational decisions. The latter, particularly when they are regulatory decisions, tend to be oriented almost entirely to the medium directly involved. This tendency is reinforced by our governing statutes, which largely mandate a one-medium approach to problems and, indeed, by the Agency's overall legislative approach, which is to seek a package of authorities allowing it to prevent all sources of waste from resulting in unacceptable environmental degradation by prescribing media-oriented performance standards covering all avenues of waste disposal. This package of authority, once enacted, ideally should allow us to regulate, for example, an air pollutant without worrying about the effects of such regulation on water or land because our regulations governing water, solid waste and toxic wastes will ensure that the side effects do not cause undue problems in those media.

However, it would be difficult, if not impossible for any legislative program, no matter how thorough, to take into account all the environmental ramifications which Federal actions, including EPA's actions, might have. For example, we have legislation authorizing the establishment of standards of air quality, but this legislation is not so comprehensive that standards for thermal discharges from power plants may be set without consideration of atmospheric effects from alternative cooling techniques.

NEPA would require us to examine such side effects. Under the reasoning of Calvert Cliffs⁵⁷ we might even be required to reach a decision about optimal distribution of waste load, rather than merely ensuring that performance standards in each affected medium are not violated, although it is not clear that this reasoning would be applied to EPA.

Second, and on a more mundane level, we have concluded that attempting to comply with the impact statement requirements of NEPA would probably offer greater opportunities for legal challenge to Agency actions than would otherwise be the case. Of course, regardless of NEPA, the scope of judicial review of administrative actions seems to be expanding, and courts will undoubtedly require more of Federal agencies in the future in terms of setting forth the rationales for regulatory decisions. Nevertheless, as one court observed, "It is doubtful that any agency, however objective, however sincere, however well-staffed, and however well-financed, could come up with a perfect environmental impact statement in connection with any major project."⁵⁸ The probability that these imperfections will result in more litigation with industry as plaintiff, challenging environmental regulatory actions, has been recognized by CEQ in its third annual report,⁵⁹ and even by other environmental groups.⁵⁹ In addition to challenging regulatory actions per se, litigants will be able to contest the adequacy under NEPA of the impact statements covering those actions. Since it is often to the interest of the regulated to delay the imposition of environmental standards through legal challenges, such litigation may well proliferate. The cumulative effect of litigation based on NEPA is likely to result in delay in implementation of regulatory actions, and possible increased pressure on Agency decision-makers to compromise strict standards to avoid challenges to Agency action.

⁵⁷/ EDF v. Corps of Engineers, 4 ERC 1097, 1100-01 (E.D. Ark. 1972).

⁵⁸/ The Third Annual Report of the Council on Environmental Quality, pg. 254-55 (1972).

⁵⁹/ Statement of J. G. Speth, Natural Resources Defense Council, Joint Hearings Before the Committee on Public Works and the Committee on Interior and Insular Affairs, United States Senate, 92d Cong., 2d. Sess., Serial #92-H32 at 466 (1972).

Thirdly, to reiterate a concern raised earlier, regarding practically all programs there is substantial uncertainty concerning what would be involved in complying with NEPA. Major unanswerable questions exist concerning:

- the range of environmental effects that must be discussed;
- the degree to which we are required to do research concerning environmental effects of our activities that are not well understood;
- the extent to which we must describe environmental effects not within the purview of, or inconsistent with the statute governing a particular regulatory decision;
- the extent to which our consideration of such effects can allowably influence program decisions;
- whether broad scale cost/benefit analysis is permissible, or required;
- whether alternatives inconsistent with a statutory mandate should be considered;
- whether issuance of a final impact statement is required before proposed regulations can be issued; and
- which Agency regulatory actions constitute major Federal actions significantly affecting the environment.

Because of this uncertainty, analysis of how complying with NEPA will affect specific programs, substantively and procedurally, largely involves describing a range of possible effects. Similarly, firm manpower estimates are not possible. The estimates given were submitted to the Task Force by program representatives; no independent analysis was done. An advantage of an intermediate compliance alternative is that it may allow us to establish the ground rules and resolve the above-listed uncertainties in a manner that we believe to be consistent with the Agency's environmental protection mission, with less manpower requirements.

The above general conclusions can be better understood, and more specific insight can be gained into how complying with the impact statement requirements of NEPA will affect Agency operations, by examining how such compliance would affect the individual programs we have analyzed. Since Section 511(c) of the Federal Water Pollution Control Act, as recently amended, establishes definitive rules in this area for water program activities, we have eliminated those activities from the detailed analysis here.

A. SETTING OF NATIONAL AMBIENT AIR QUALITY STANDARDS

The program is an ongoing one in that there is continuing review and possible revision of established standards with an average of no more than one action a year revising published standards, or establishing standards for additional pollutants. Past standard setting actions would not be affected by a decision to comply with NEPA, since the period during which those standards could be challenged has expired. Therefore, only the effects of complying with NEPA upon our future standard setting or revision actions will be considered.

I. Full Compliance

1. Substantive Effects: Pursuant to the directive of the Clean Air Act, national primary and secondary air quality standards have been established almost exclusively with reference to available information on the adverse effects on health and welfare of regulated air pollutants. Criteria and control techniques documents, issued with standards, discuss in considerable detail both such effects and available control technology.

If impact statements were to be prepared after designation of pollutants when standards are proposed, it seems unlikely that complying with NEPA would result in any change in proposed standards. It is conceivable, however, that cost/benefit balancing and consideration of secondary effects would result in adoption of less stringent standards. However, as more information becomes available about minor adverse effects from low levels of pollution, the Agency might be required to explain in somewhat more detail than it has in the past why it has chosen to set standards at a level that does not prevent certain such adverse effects. NEPA could require EPA in an impact statement to detail anticipated changes in ambient air conditions, to discuss the environmental impact of alternative schemes for meeting standards, or to prepare cost/benefit analysis of proposed standards.

If compliance with NEPA is undertaken prior to making a determination to control a pollutant, advantages could be realized. Compliance at this point may provide EPA with the mechanism to determine the level at which welfare effects may be acceptable when balanced against

other considerations. An environmental impact statement, prepared prior to designation of pollutants, could indicate possible options, resultant effects and alternatives which would aid the Administrator in determining which pollutants should be controlled. Preparing the impact statement prior to the designation of pollutants would allow the public to provide input earlier in the decision-making process regarding whether a pollutant should be categorized as criteria or non-criteria.

2. Procedural Effects: It seems unlikely that complying with NEPA will result in any significant procedural disruption in the program. However, possible legal challenges based on NEPA might delay issuance of standards or designation of pollutants for which standards will be set.
3. Incremental Manpower Requirements: Little incremental manpower is likely to be required, unless the impact statements prepared would have to include considerable discussion of environmental effects and cost/benefit balancing, in which event a 50% increase in the 20 man-years presently required to designate a pollutant and develop the applicable standards might be needed.

<u>Actions/Year</u>	<u>Man-Years/Action</u>		<u>Total Man-Years</u>	
	<u>Max.</u>	<u>Min.</u>	<u>Max.</u>	<u>Min.</u>
1-2	10	2	20	2

4. Benefit: Since it is unlikely that changes would occur in the program if impact statements were prepared after determination of pollutants, little programmatic benefit would be derived from complying with NEPA. If impact statements must include considerable discussion of environmental effects or costs, a better understanding of the overall significance of standard setting actions would be obtained.

If impact statements were prepared prior to designation of pollutants, public input relative to selection of pollutants would be taken into consideration. Because the aggregate impact of selecting a pollutant would be examined, the formulation of individual standards mandated by the Act would be enhanced. The examination of alternatives and secondary impacts could have an effect on the decision-making process.

II. Intermediate Compliance

The changes in the program between full compliance and maintenance of the status quo largely involve issuance of an impact statement. Intermediate compliance would consist of issuance of an explanation of environmental effects based primarily on information already available to the Agency.

B. APPROVAL OF STATE IMPLEMENTATION PLANS

Through the end of FY 1974, the principal activities of this program will involve approval of (1) all State plans for NO_x control; (2) compliance schedules where States failed to take proper action; (3) new source construction permits where States had inadequate procedures; (4) plans where 18-month extensions were granted; (5) implementation plans for new SO₂ secondary standards and issuance of guidelines for these plans; (6) revisions to plans. Activities will also include issuance of regulations on significant deterioration, issuance of transportation guidelines and development of plans for Air Quality Control Regions with substantial air pollution problems attributable to mobile sources. Approximately 24 States have remaining regulatory deficiencies with several States having emission limitation problems.

Except in a few instances where the issue already has been raised in litigation, past plan approvals and issuances would not be affected by a decision to comply with NEPA. Therefore, only the effects of applying NEPA to future actions will be considered.

I. Full Compliance

1. Substantive Effects: In addition to information currently available on the impact of the plans and portions of plans, an impact statement on plan approvals and issuance of substantive plans would probably have to describe the environmental effects of the plan on media other than air, and detail alternative means of achieving national ambient air quality standards. A cost/benefit analysis of alternatives might possibly also be required.

It is possible that EPA would also be required to consider and analyze alternatives which would not involve compliance with national standards. States may develop and implement a plan to meet more stringent air quality standards than those set by EPA; in these

cases, EPA would respond to meeting the national standards and not to the State's meeting the more stringent standards. At a minimum, however, there would be substantial additional analysis of the effects of alternative plans on other media and areas such as land use.

2. Procedural Effects: Complying with NEPA will expand the scope of judicial review at least to include the adequacy of impact statements. It might also lead to the courts' reviewing substantive decisions on the basis of criteria established by NEPA to the extent they supplement criteria in the Clean Air Act. Delays attributable to litigation and to preparation of impact statements will occur, and will have close to a 1:1 effect in delaying attainment of desired pollution abatement conditions.
3. Incremental Manpower Requirements: There are now about 40-50 EPA personnel engaged in this program including OAWP staff, Regional Office staff, and General Counsel staff. If the States can be required to include environmental assessments with SIP's and substantive changes to SIP's, a substantial increase will still be required, depending largely upon the extent to which factors other than air quality must be considered in impact statements. A similar increase is likely to be required in the resources states devote to developing SIP's.

<u>Actions/Year</u>	<u>Man-Years/Action</u>		<u>Total Man-Years</u>	
	<u>Max.</u>	<u>Min.</u>	<u>Max.</u>	<u>Min.</u>
5/plan*	.5	.1	137.5	27.5
(total =				
55 X 5 = 275)				

*This estimate includes all compliance schedules for each State as one action per State; all new source reviews for each State as one action per State.

4. Benefit: The principal programmatic benefits of NEPA compliance will be that SIP's and plans issued by EPA may take greater account of effects on other media, and the explanatory materials to be included in impact statements will furnish a basis for more informed public comment about, and understanding of both approved SIP's and EPA-issued plans.

II. Intermediate Compliance

1. Description: This option would involve publishing with approval of each SIP, each revision, additional

requirement or each promulgation of regulations by EPA, a relatively brief explanation of what alternatives were available to achieve national ambient air quality standards, what were the costs and principal effects on other media and land use of those alternatives, and why a given alternative was chosen. States could be requested to furnish environmental assessments with their SIP's, which would furnish much of the information for EPA's explanatory statement. However, the States' ability or willingness to comply with such a request is questionable.

2. Incremental Manpower Requirements: Since some of the work going into preparation of such assessments and explanation is assumed to take place already, and since further explanations of EPA decisions will be required in response to litigation, the following additional manpower would be needed to prepare the necessary impact statements:

<u>Actions/Year</u>	<u>Man-Years/Action</u>		<u>Total Man-Years</u>	
	<u>Max.</u>	<u>Min.</u>	<u>Max.</u>	<u>Min.</u>
5/plan (total = 55 X 5 = 275)	.3	.05	82.5	13.75

3. Benefit: The benefits from this approach would be further consideration of inter-media effects in approving or issuing implementation plans, and better public understanding of why program decisions have been reached.

C. ESTABLISHMENT OF STANDARDS OF PERFORMANCE FOR
NEW STATIONARY SOURCES (AIR)

The program involves (1) designation of the source category and (2) setting performance standards. The Clean Air Act requires that the selection of emission standards reflect both adequately demonstrated technology and consideration of cost of control. The source categories considered are those which may contribute significantly to air pollution causing or contributing to endangerment of public health or welfare.

I. Full Compliance

1. Substantive Effects: Full compliance with NEPA will result in better documentation of the secondary impact of the standards and of the criteria for selection of the source categories to be regulated. The alternatives explored, both in regard to standards and technology, would be disclosed to the public. Any adverse effects would also be made public with the rationale for the standard set and the balances of benefit versus adverse effects. Currently the development of new source performance standards takes into account the cost of control and the economic impact of the standard. If compliance with NEPA requires a balancing of cost and environmental effects or benefits, significant changes in the standards might occur so that best control technology might not be prescribed. The performance standards, therefore, may not meet the criteria of the Act.
2. Procedural Effects: It is assumed the draft impact statement will be published simultaneously with the proposed standards (120 days after categories published) and the final statement will be published prior to promulgation of the standards (90 days after standards are proposed).^{60/} Because standards for several categories are proposed at the same time and the time schedule is severe, a great amount of additional effort will be required. More detailed disclosure of an increased variety of factors will substantially increase the range of public comments. Because performance standards are established for individual source categories, cost/benefit analysis considering the total environment will open many debates on the

^{60/} The legal problems with this program are discussed supra p. 36-37.

level of the standards. Therefore, significant delays due to increased litigation may result.

3. Incremental Manpower Requirements: An estimated 19 new source performance standards will be formulated in FY 73 and an estimated 10 will be established in FY 74. At least one and a half additional man-years per standard are estimated to be needed for full compliance with NEPA: 1 man-year to complete additional documentation, cost/benefit analysis and draft impact statements; 1/2 man-year to complete final impact statements and follow through appropriate channels. This represents approximately a 100% increase in technical staff presently responsible for actual preparation of the standards and 50% increase in staff responsibility for briefing materials and standards review. If manpower were not increased, the rate of standards being promulgated would be decreased.

	<u>Actions/Year</u>	<u>Man-Years/Action</u>		<u>Total Man-Years</u>	
		<u>Max.</u>	<u>Min.</u>	<u>Max.</u>	<u>Min.</u>
FY 73	19	2.0	1.5	38	28.5
FY 74	10			20	15

4. Benefit: Full compliance with NEPA would result in providing more information to the public, industry, and other government agencies in regard to the source categories selected, standards proposed, and consequences and benefits of these actions. Full compliance might necessitate a balancing of costs and benefits of the standards being considered; the benefits to the public health and welfare would be stressed. The basis and rationale for setting standards would be documented for internal and public use.

II. Intermediate Compliance

1. Description and Benefit: The option for intermediate compliance selected for new source performance standards is to comply with NEPA analysis requirements without filing an environmental impact statement. In this way, EPA would more thoroughly analyze the consequences of its standards and control technology

and the rationale for setting the standards at certain levels and examine in detail the alternatives and secondary impacts. If there are portions of NEPA which conflict with legislative mandates of this program, these need not be addressed under this option. Following this option would provide a more accurate estimate of the manpower required to complete the additional analysis required and an indication of whether statutory time constraints would have to be changed were NEPA to be legally applied.

2. Incremental Manpower Requirements: The additional manpower required under this option would be approximately one man-year per standard to complete development of the required additional data and information. This estimate may need to be greater due to the setting of standards for various categories simultaneously.

<u>Actions/Year</u>	<u>Man-Years/Action</u>		<u>Total Man-Years</u>	
	<u>Max.</u>	<u>Min.</u>	<u>Max.</u>	<u>Min.</u>
19	1.5	1.0	28.5	19

D. ESTABLISHMENT OF EMISSION STANDARDS FOR
HAZARDOUS AIR POLLUTANTS

The program involves (1) designation of pollutants as hazardous and (2) establishment of emission standards. The Clean Air Act provides for consideration only of health effects of these pollutants, with standards to be set at levels which provide an ample margin of safety to protect the public health.

I. Full Compliance

1. Substantive Effects: When standards are proposed additional consideration would have to be given to the secondary environmental impact and any adverse effects of the standard. The alternatives to the standards would have to be documented. However, no more than minor changes in the hazardous standards promulgated by EPA would probably result. Current EPA procedures in developing standards include the development of cost estimates for control and an investigation of relevant technology of control. If compliance with NEPA would require a balancing of costs against environmental effects or benefits, the decision-making process would be materially changed and different standards would probably result, thus conflicting with the existing mandate which calls only for consideration of health effects.
2. Procedural Effects: Full compliance with NEPA could constitute a significant problem. Section 112 of the Clean Air Act is written such that the Administrator is authorized to take immediate action to control new and existing sources if a substance is judged to be hazardous. Under the Act, the Administrator does not need to be concerned with control technology to set emission standards. Compliance with NEPA might imply such a requirement. Since the Act only prescribes milestones after a substance has been designated as hazardous, meeting such deadlines is dependent on the state of knowledge prior to designation. More time would therefore be needed prior to designation. There is a possibility that litigation delays might occur as a result of compliance with NEPA.

3. Incremental Manpower Requirements: Setting a hazardous standard currently requires 3-4 man-years of effort. The additional effort would require a minimum of 1-1/2 man-years for each standard. The estimate of 1-1/2 man-years per standard includes 1 man-year for the additional documentation and 1/2 man-year to prepare both the draft and final impact statement and follow it through the necessary administrative review.

<u>Actions/Year</u>	<u>Man-Years/Action</u>		<u>Total Man-Years</u>	
	<u>Max.</u>	<u>Min.</u>	<u>Max.</u>	<u>Min.</u>
1-3	2.0	1.5	6.0	1.5

4. Benefit: Full compliance with NEPA would require EPA to provide increased documentation regarding the formulation of hazardous standards. This added effort would provide the public, other agencies, and industry with more information to assist in evaluating the standards. The balancing of costs against effects could not be of value in the decision-making process, since protection of the public health is the overriding consideration in formulating the standard.

II. Intermediate Compliance

1. Description and Benefit: Information could be developed as required by the applicable portions of NEPA without overriding the statute governing the standard setting. The Clean Air Act allows for consideration of only health effects in setting hazardous standards at a level which provides an ample margin of safety to protect the public health. The governing statute does not allow for a balancing of costs against environmental effects. The development of data and information required by the applicable portions of NEPA would result in a clearer understanding of the consequences of these standards.

2. Incremental Manpower Requirements:

<u>Actions/Year</u>	<u>Man-Years/Action</u>		<u>Total Man-Years</u>	
	<u>Max.</u>	<u>Min.</u>	<u>Max.</u>	<u>Min.</u>
1-3	2.0	1.0	6.0	1.0

E. ESTABLISHMENT OF MOTOR VEHICLE EMISSION STANDARDS

I. Full Compliance

1. Substantive Effects: Full compliance with NEPA would expand the range of environmental effects to be analyzed prior to adopting motor vehicle emission standards. At the present time, considerable attention is given to the effect of the proposed standard on the air pollutant to be regulated, but not on the ambient concentrations likely to result from various control levels. The effect of controlling the regulated pollutant on emissions of other air pollutants has been considered only to a limited extent. Impacts on other media such as possible solid waste problems caused by use of disposable materials (e.g., catalysts) have not been explicitly considered. There has also not been consideration of the impacts associated with developing the resources used to manufacture emission control devices (e.g., platinum). Many control approaches are expected to significantly increase fuel consumption and the attendant impacts of providing additional fuel have not to date been directly addressed.

Full compliance with NEPA could expand the range of alternatives considered; although an effort is presently underway, independent of the possible application of NEPA, to expand the program's analysis of alternatives. Standard setting has to date focused on the most stringent reductions technologically feasible and has been applied independently to different classes of motor vehicles. The program intends in the future to develop overall control strategy techniques in which motor vehicle emissions attributable to each class of vehicles will be analyzed in relation to each other and to ambient levels of air pollution. Such techniques will be applied to the extent that reliable models and base data become available.

Similarly, an effort is underway to expand the assessment of cost/benefit associated with proposed standards. In the past, efforts have been made to estimate the cost of the emission controls necessitated by new emission standards, in terms of the direct cost for the emission control hardware, as well as to

quantify the emission reduction which the standards are to achieve. However, because such emission standards have been established independently for individual classes of motor vehicles, it has not been possible to carry out accurate cost/effectiveness analyses as part of establishing a multi-source control strategy. It is expected that more detailed cost/effectiveness analyses will be prepared in the future. Expanded consideration of secondary effects and a cost/benefit analysis may result in different standards.

2. Procedural Effects: Assuming that a draft impact statement can be circulated at the time proposed standards are published, full compliance with NEPA is not likely to produce major procedural effects. There are no statutory time constraints governing the promulgation of future standards, and the actual promulgation of the standards is unlikely to be significantly delayed, assuming that additional staff are made available to do the additional analysis and help prepare the impact statements. The impact statement would of course be subject to judicial review. Unlike most other standards already promulgated under the Clean Air Act, mobile source standards already promulgated are still subject to judicial review on the grounds that no impact statement was prepared.

If final impact statements are required to be prepared prior to publication of the proposed standards, a potentially significant restructuring of the procedures of the program would be involved. Formal consultation with outside groups would then be required prior to formulation of a proposed standard ready for publication in the Federal Register. Consultations would then be required both at the draft impact statement stage and at the stage when the standards are published in proposed form in the Federal Register.

3. Incremental Manpower Requirements: One to five motor vehicle emission standards are likely to be proposed each year. Each of these standards will involve about 6 to 14 man-years of effort. An additional one to two man-years of effort per standard would probably be involved for the first few standards if an impact statement were to be prepared. This additional manpower would be needed to conduct the additional analysis and write the impact statement. After the first few statements have been prepared, the additional manpower needed to fully comply with NEPA may be reduced from one to two man-years per standard to six to 12 man-months per standard.

<u>Actions/Year</u>	<u>Man-Years/Action</u>		<u>Total Man-Years</u>	
	<u>Max.</u>	<u>Min.</u>	<u>Max.</u>	<u>Min.</u>
1-5	2	1	10	1

4. Benefit: Many of the requirements of NEPA will be met by the procedures under which future motor vehicle emission standards will be established. However, adoption of an EIS requirement either for individual emission standards or for larger control strategies embodying groups of emission standards could improve the quality of emission standard decisions both through assuring consideration of a wider range of environmental impacts and alternatives and through developing better documented and coordinated pollutant control strategies. Such a procedure would also be likely to much more meaningfully involve public participation (other than that from a very limited number of industry or independent technical experts) in the regulatory process.

II. Intermediate Compliance

Many of the requirements of NEPA are expected to be met under the procedures to be followed for the establishment of future motor vehicle standards. Intermediate compliance would consist of issuance of an explanation of environmental effects based primarily on information already available to the Agency.

F. SUSPENSION OF MOTOR VEHICLE EMISSION STANDARDS

I. Full Compliance

1. Substantive Effects: The primary environmental impact involved, the impact of a suspension decision upon ambient air quality, was not considered in the only formal decision to date on suspension of the 1975 motor vehicle emission standards. Secondary effects were informally considered, but sketchy data prevented detailed analysis. Interrelationships exist among various control technologies and emission levels. For example, reductions in emissions of carbon monoxide are accompanied by increased emissions of nitrogen oxides. Secondary impacts of controls upon fuel supply, and the general energy picture, were not considered. A range of alternatives for control were considered, including the percentage of models of major manufacturers which would be able to meet each control level. However, the environmental effects of each level of control and the costs associated with the levels were not considered. EPA relied on studies of economic impact of emission control standards which were done by the National Academy of Sciences. These studies, and other studies which have been done, are useful in providing estimates of the costs of compliance with 1975 standards and selected alternatives. Accordingly, much additional work would be required to perform full analysis of the costs of several alternatives. The Clean Air Act precludes consideration of many of the factors which NEPA would require to be set forth in an impact statement. If NEPA is nevertheless held to require consideration of these factors in the substantive decision, decisions contrary to the requirements of the Clean Air Act might result.
2. Procedural Effects: The major procedural impact would be the effect upon statutory deadline. The Clean Air Act requires a decision within 60 days after request. CEQ Guidelines call for 90 days to review an EIS, but allow exceptions for emergencies. The key question, therefore, is whether it would be possible to complete an EIS and go through quick pro forma circulation to other agencies before the 60 days were up. If the Greene County doctrine is applied so as to require an EIS prior to hearing, compliance would be virtually impossible. Further, the document would be of less value, since the decision must be based upon evidence adduced at the hearing. This evidence would

also be needed to produce a useful EIS. If, however, courts were to accept the procedure whereby the EIS is developed prior to the decision, but following the hearing, at least a brief EIS could be prepared and considered in the decision-making process. An extensive EIS would be difficult to prepare within 60 days.

3. Incremental Manpower Requirements: Roughly 23 employees were involved for about three months in the decision on suspension of standards. The following is an estimate of the additional personnel which would be required to comply with NEPA:

(a) Brief EIS would require 9 additional staff for about three months to write EIS after hearings, but before decision, which would include analysis of:

- (1) Rough estimate of nation-wide additional pollutant load, and ambient effects on selected cities, assuming (incorrectly) linear emissions-ambient concentration relationship of alternative levels of control.
- (2) Trade-offs of regulating one pollutant as that affects control of other pollutants.
- (3) Aggregate impact of standards upon fuel supply.

(b) "Full-blown" EIS -- There is a high degree of uncertainty whether a statement could be drafted within 60 days which would provide air-tight analyses of all factors NEPA might require us to consider. However, it is estimated that approximately 30-35 persons (in addition to the 23 which would otherwise work on suspension proceedings) would be required to do all the tasks listed under (a) above, and the following additional tasks:

- (1) Develop full analysis of impact upon fuel resources and energy supply nationwide, including oil reserves, alternative energy sources for home heating and electric power generation.
- (2) Consider impact of alternative standards upon air quality in air quality control regions with worst pollution problems from autos.
- (3) Estimate impact of standards upon supply of platinum, cobalt, and other materials needed for control systems.

<u>Actions/Year</u>		<u>Man-Years/Action</u>		<u>Total Man-Years</u>	
		<u>Max.</u>	<u>Min.</u>	<u>Max.</u>	<u>Min.</u>
FY '73	2	8	2.25	16	5
FY '74	1			8	2.25

4. Benefit: Preparation of an EIS would provide, in part, for examination of whether or not national standards make sense, or whether different standards should be established for vehicles to be sold in, for example, Los Angeles (serious NO_x problem), and Chicago (serious CO problem). Relationship of motor vehicle emissions control and fuels and energy problems could be explored.

II. Intermediate Compliance

1. Description: If preparation of brief EIS is found impracticable, or if courts disallow procedure, the best alternative would be to perform, on an ongoing basis, the type of analysis which NEPA requires. This would include, at a minimum, studies under 3(a) above with, if possible, addition of study required under

3(b) (2) of Section I above.

2. Incremental Manpower Requirements: Since work could be spread out over a long period of time, modifications in existing study efforts and five additional personnel working for 18 months to two years probably could produce the necessary analysis.

<u>Actions/Year</u>	<u>Man-Years/Action</u>		<u>Total Man-Years</u>	
	<u>Max.</u>	<u>Min.</u>	<u>Max.</u>	<u>Min.</u>
FY'73 2	10	7.5	20	15
FY '74 1			10	7.5

3. Benefit: This approach would provide essentially all the benefits listed under I.4. above. It could be integrated into program planning and research efforts, without the need for a crash program to produce results within 60 days.

G. PESTICIDES REGISTRATION PROGRAM

(including the establishment of residue tolerances)

The program is concerned with the registrations of specific pesticide chemicals for well-defined uses. The primary types of registration actions that are of interest are: (1) new products involving new chemicals; (2) new uses involving previously registered chemicals; (3) amendments to remove uses cancelled; (4) renewal of registrations; and (5) classification of products for restricted use. The new pesticides bill, which includes new provisions for public participation, can be interpreted as superseding any requirements to file impact statements for registration action.

I. Full Compliance

1. Substantive Effects:

The following additional information might be needed if impact statements were required:

- (1) Description of pest problem and magnitude
- (2) Estimate of use of chemical and geographical distribution
- (3) Addition to human total dose (tolerances only)
- (4) Human population effects expected
 - (a) short-term
 - (b) long-term
- (5) Environmental effects expected
 - (a) short-term
 - (b) long-term
- (6) Alternatives
 - (a) Other registered pesticides
 - (b) Non-chemical controls

- (c) Crop substitutions
- (d) No pest control
- (e) Abandonment of a crop
- (7) Benefit-cost-risk analysis: a point-by-point comparison of each aspect developed in (3), (4), and (5) for each alternative including direct and indirect economic effects
- (8) Irreversible or irretrievable commitment of resources.

Some information on total dose and human and environmental effects is considered in the present registration program. The new Act does not change these information requirements. However, the writing of an impact statement may require substantial incremental effort in all of the areas listed above. This is especially true in the case of consideration of alternative pesticide products as a substitute for the product under consideration. The new bill explicitly prohibits the Agency from considering alternative products in its registration decisions.

The information for (1), (3), (4), (5), and (8) can be obtained from the manufacturer requesting the registration, but the other information would have to be gathered in-house.

A minimal effort would probably require us to cover sections (1) and (3), completely; (4) and (5) at reduced level--(individual rather than whole population discussion); (6) only registered chemicals, non-chemical controls (brief review), and no pest control alternatives; and (8) completely.

2. Procedural Effects: The preparation of impact statements could result in delays in the registration process and greatly increase the number of tolerance petitions which will take more than the 90-day statutorily mandated review period. Delays in this program under present budgetary constraints are already a major source of complaints from industry and Congress.
3. Incremental Manpower Requirements: The manpower costs would vary considerably from maximum to minimum compliance as follows:

<u>Class</u>	<u>Actions/Yr.*</u> <u>No.</u>	<u>Man-Yr./Action</u>		<u>Total Man-Years**</u>	
		<u>Max.</u>	<u>Min.</u>	<u>Max.</u>	<u>Min.</u>
New chemicals and new uses	115	2.0	0.4	230	46
Renewals	5,000	0.05	0.005	250	50
Amendments	2,500	0.02	0.002	50	5
Total				530	101

*These estimates are based primarily upon FIFRA and will need to be adjusted to reflect the new Act as we get a better understanding of the workload imposed by that Act, especially in the areas of intrastate products and classification of products for restricted use.

**These estimates assume that it will not be possible to write multiple-action EIS's. In fact, such statements might be possible in the case of new chemicals and new uses. Assuming an arbitrary operating rule of 3 registration actions per impact statement, the number of impact statements prepared on new chemicals and new uses might be reduced in half, down to 115 M/Y (max.) and 23 M/Y (min.).

4. Benefit: There would be consideration of more points of view and subsequently, a more comprehensive analysis on the decision to register, a broader review of alternative control measures, more involvement of other Federal, State and local agencies, as well as other interested parties in the registration procedure.

II. Intermediate Compliance

1. Description: Under the new pesticides act notice of an application will be published in the Federal Register. In addition, the data submitted for registration as well as the basis of the EPA decision will be published 30 days after the decision.
2. Incremental Manpower Requirements: No additional manpower will be required over and above that required to implement the new Act.
3. Benefit: The new Act will provide for a significant amount of public participation in the process without EPA incurring the cost of filing an impact statement.

H. CANCELLATION/SUSPENSION OF PESTICIDES

The program involves the cancellation of a registration of a chemical compound either for a specific use or all uses. Cancellation actions are taken for (1) routine technical or legal reasons (which include failure to renew as provided by law, non-compliance with a valid residue tolerance, or requests by a manufacturer to discontinue registration) and (2) substantial questions of safety to man and his environment. Cancellations under this latter category would be expected to have the greatest impact on the environment. The new pesticide bill, which establishes some new rules for public participation in the decision process, can be interpreted as superseding any requirement to file impact statements on cancellations and suspensions.

I. Full Compliance

1. Substantive Effects: Compliance with NEPA might mean the presentation of information on economic impacts, consequences of both chemical and other alternatives, and effects of a larger range of alternative actions. In the case of cancellations because of substantial questions of safety and where a hearing is held, much of the required information for NEPA is available to EPA and is contained in the Administrator's decision accompanying his cancellation order. In the case of cancellations not appealed and those made on technical grounds, this information might be very difficult to obtain from the industry.
2. Procedural Effects: Under the Greene County rule, an impact statement must be prepared and made available prior to the beginning of the public hearings. To prepare the statement at this point in the administrative procedure would place EPA in the role of providing the pros and cons of the action. It would transfer the burden of proof with respect to benefit/risk to EPA rather than leaving it with the registrant or possible appellant. The preparation of an impact

statement after a public hearing would probably result in a violation of the 90-day deadline for the Administrator's decision.

Additionally, the present proceedings (and the new pesticides statute) provide an on-the-record public forum to present new information not available to the Administrator when he initiates cancellation proceedings, which will be weighed in the final decision.

3. Incremental Manpower Requirements: The following estimates are based on the assumption that much of the information required for an impact statement could be developed in the normal public hearing process for those cancellations which are appealed. The incremental cost of gathering the information would be minimal. The man-year requirements for preparing the statements are especially high in the case of all cancellations and suspensions because of the great time pressure for producing the statement, and the need to deal with the issues very carefully because of the potential for controversy in some of these cases.

<u>Actions/Year</u>		<u>Man-Years/Action</u>		<u>Total Man-Years</u>
		<u>Gathering Information</u>	<u>Preparing Statement</u>	
Cancellations involving a public hearing	4	0.0	1.0	4.0
Other cancellations and suspensions requiring an impact statement*	10	1.0	1.0	<u>20.0</u>
Total				24.0

*These estimates assume that the impact statement is in fact written after the Federal action is announced, especially in the case of suspensions.

4. Benefit: The impact statement process could provide a fuller consideration of all ramifications of the decision on the environment including secondary effects and help us in selecting among alternatives to cancellation, including postponement of action.

II. Intermediate Compliance

1. Description: In those cases where cancellations and suspensions result in a public hearing, EPA could incorporate into the hearing record much of the information which would normally be required for an impact statement.
2. Incremental Manpower Requirements: Most of this information can be obtained with only marginal costs in manpower.
3. Benefit: This option would put most of the information required by NEPA before the public and the Administrator during the decision-making process without the requirement to write and circulate an impact statement.

I. SOLID WASTE MANAGEMENT GUIDELINES

Two Solid Waste Management Guidelines will soon be published in the Federal Register to regulate incineration and sanitary landfill operations under the auspices of Federal executive agencies. The guidelines will also be used as recommended models for state and local governments in their solid waste management activities, and as mandatory standards for various grants recipients under sections of the Solid Waste Disposal Act, as amended. Other guidelines (exact numbers are not known) will be published in subsequent years.

I. Full Compliance

1. Substantive Effects: The substantive requirements of NEPA are substantially complied with under the present operations. The guidelines are based upon criteria including consideration of the environmental impact on air and water quality, land use, and aesthetics. The sanitary landfill guidelines require such things as proper siting to prevent water pollution from run-off and drainage, final landscaping for land use restoration and scenic improvement, and the prevention of open burning. Technical feasibility and reduction of health and safety factors are also considered. Alternative systems are considered but are not described in any formal decision-making document. Further analysis and description of alternative systems available would be required by NEPA. Some cost/benefit analysis is done with respect to the various alternatives of solid waste management practices as well as the costs associated with construction, operation, and maintenance of the system.
2. Procedural Effects: Presently during the early stages of development of a guideline, comments are solicited from Federal and State agencies, university personnel, consultants, and local solid waste managers by way of conferences, meetings, training sessions, field visits, etc. Public disclosure is effected through OSWMP publications, etc. which reveal the rationale and state-of-the-art information on which the guidelines are based. However, there is no formal review of the guidelines by outside groups. There may be some delays in promulgation of guidelines attributable to litigation caused by increasing the scope of judicial review (at least to include the adequacy of the impact statement) if an impact statement were required.

3. Incremental Manpower Requirements: Little incremental manpower is likely to be needed to prepare any necessary impact statements.

<u>Actions/Year</u>	<u>Man-Years/Action</u>		<u>Total Man-Years</u>	
	<u>Max.</u>	<u>Min.</u>	<u>Max.</u>	<u>Min.</u>
2	2	1	4	2

4. Benefit: The adjustments made would give greater visibility to the environmental effects of the program as well as providing a basis for more informed public comment on proposed guidelines.

II. Intermediate Compliance

Few program changes are needed for full compliance with NEPA. Intermediate compliance would consist of issuance of an explanation of environmental effects based primarily on information already available to the Agency.

J. GENERAL FEDERAL RADIATION GUIDANCE

I. Full Compliance

1. Substantive Effects: It is presently contemplated that general Federal guidance would be based upon broad risk/cost/benefit analyses taking a wide range of factors into account. Alternatives to any proposed action will be considered, including the alternative of no guidance. Thus, it is possible that NEPA would not expand the scope of factors to be considered in issuing such guidance. However, this is not certain until the program has developed experience in issuing such guidance.
2. Procedural Effects: Comments of affected Federal Government agencies would be solicited prior to the issuance of guidance. Thus, compliance with NEPA would not increase procedural burdens.
3. Incremental Manpower Requirements: None required.
4. Benefit: The program anticipates developing analyses that would be comparable to those required by NEPA. Full compliance would additionally provide for public participation in the process.

II. Intermediate Compliance

Intermediate compliance would consist of issuance of an explanation of environmental effects based primarily on information already available to the Agency.

K. GENERALLY APPLICABLE ENVIRONMENTAL RADIATION STANDARDS

The comments made with respect to the General Federal Radiation Guidance Program are equally applicable to this program.

CHAPTER VI

COURSES OF ACTION AVAILABLE TO EPA

The preceding chapters of the report have focused on the operation of EPA's major regulatory programs and what the effects would be on them as a result of requiring the preparation of environmental impact statements. The first section of the report looked at the extent to which the various regulatory programs involved major Federal actions significantly affecting the environment. An analysis was done of how these programs would operate, in terms of the full range of environmental factors which might be considered, and procedures which might be followed, in complying with the environmental impact statement requirement of NEPA. The following chapter examined how the courts have thus far interpreted the provisions of NEPA. Finally, in Chapter V we analyzed what the substantive and procedural effects on EPA regulatory programs would be if impact statements were prepared in conjunction with major actions taken in these programs.

EPA must at this point decide for each of its regulatory programs on one of three basic alternative approaches to be adopted. First, for those regulatory programs presently under litigation, we could seek a judicial determination that NEPA does not apply to EPA's actions. For those regulatory programs not under litigation, we could continue program operations under the Agency's present interpretation that the impact statement requirements of NEPA are inapplicable. Second, we could seek a legislative exemption from NEPA for those regulatory programs not presently explicitly exempted, while continuing to pursue litigation in the interim. The legislative exemption could either take the form of covering only past actions and, for a fixed period of time, future actions, or could be a request for permanent legislative relief. A third alternative would be to not attempt to secure a special exemption from the courts or Congress, but rather comply with the full requirements of NEPA and prepare environmental impact statements as necessary.

If either the first or second alternative is selected, then one or more sub-options need to be selected as well. The first sub-option is to make no changes in the program's operations pending the outcome of judicial or legislative determination. A second sub-option would be to develop contingency plans in the event that EPA is subsequently required to comply with NEPA. A contingency plan might consist of a pilot program

or developing a detailed least-cost strategy for actual compliance, including preparation of proposed regulations and procedures. A third sub-option would be some form of intermediate compliance which would entail either publishing detailed explanations of the rationale underlying major Agency actions or selectively preparing impact statements while continuing to maintain that NEPA does not legally apply.

Any one of these alternatives and sub-options could be followed for each of the regulatory programs. EPA could choose to prepare impact statements for some of the programs while seeking a legislative exemption or waiting for a favorable court decision for other of its programs. The several classes of regulatory programs, standard setting, plan approval, quasi-judicial actions, permits, and registrations, are sufficiently different to allow separate consideration.

A. First Alternative - Judicial Determination that NEPA does not apply.

The first course of action would require looking to the courts for support of EPA's interpretation of an exemption from NEPA for those regulatory activities not already explicitly exempted. If successful, this course of action would leave intact past regulatory actions taken by EPA. The past actions could not then be reopened for further analysis under NEPA and more importantly, programs would not be stalled pending the preparation of EIS's. This alternative would entail little or no disruption to EPA's programs, no additional administrative burdens, and therefore, would require little or no additional manpower. This course of action would also put EPA in a better position for some of its programs to limit the range of factors required to be considered before an action is taken. For example, where EPA is directed to establish standards on the basis of "best available technology" interested groups would not have the opportunity to alter the standards by requiring EPA to consider cost-benefit balancing as part of its decision.

Perhaps the clearest advantage in continuing to assert EPA's present contention in court is that this course of action will obtain a much needed judicial clarification concerning whether NEPA legally applies to EPA's regulatory programs. If EPA ever has to seek a legislative exemption for some of its programs it seems doubtful that Congress would consider a request for such legislation unless the basic legal question had first been clarified.

If, however, EPA is unsuccessful in obtaining a favorable judicial determination much time will be lost in implementing program objectives. Substantial Agency manpower might be inefficiently utilized, and the Agency's objective of cleaning up the environment could be severely impaired. Further analysis and preparation of impact statements for past actions might be required. Following this course of action might also adversely affect EPA's credibility with environmentalists and others.

B. Second Alternative - Legislative Exemption from NEPA
(pursue litigation in the interim).

The second major approach available to EPA is to request Congress to amend NEPA so that the Agency's regulatory programs are explicitly exempted from the requirement to prepare impact statements. A legislative exemption has already been given by Congress for almost all actions taken by EPA under the Federal Water Pollution Control Act. The advantages and disadvantages of seeking a legislative exemption are very similar to those discussed concerning the first alternative. If EPA is successful in securing a total exemption EPA's actions to date would not be reopened for further analysis under NEPA and programs would not be stalled pending the preparation of EIS's. The result would be minimal program disruption and little or no additional manpower needed. This course of action would also put EPA in a better position to limit the range of factors required to be considered by EPA before taking an action. Using an earlier example, in the case where EPA is directed to establish standards on the basis of "best available technology," interested groups would not be in a position to try to alter the standards by requiring EPA to consider cost-benefit balancing in an impact statement. The advantage of this approach over seeking a judicial exemption is that this exemption would most likely apply to all EPA programs rather than a single program. Litigation should be pursued concurrent with any attempt to obtain a legislative exemption to avoid preparation of impact statements while the legislative exemption is being sought. If judicial decisions are handed down prior to final legislative action, pursuance of litigation would also yield a much needed judicial clarification concerning whether NEPA legally applies to EPA's regulatory programs.

The disadvantage of this approach is that it would take a substantial amount of time and the likelihood of obtaining a legislative exemption is unknown. Congressional committees with jurisdiction over NEPA have been generally unsympathetic to requests for exemptions.

If EPA's attempts to secure a legislative exemption were unsuccessful, a great deal of time would be lost in implementing

program objectives. Further detailed analysis of past actions and preparation of impact statements for them may then be required.

Any approach involving a legislative exemption raises the likelihood that other Federal agencies would seek an exemption from NEPA. Any attempt by EPA to secure such an explicit exemption might damage the Agency's credibility.

C. Third Alternative - Comply With Full Requirements of NEPA
and prepare impact statements as necessary.

The third alternative available to EPA is to prepare impact statements in connection with its major regulatory actions in accordance with the requirements of NEPA. The courts and Congress may not respond favorably to EPA's request for an exemption which would result in the Agency ultimately being required to follow this alternative. Deciding upon this alternative from the onset would give the Agency a headstart on preparing impact statements and could reduce chances of successful court challenges to our actions on the basis of non-compliance with NEPA.

Full compliance with NEPA might also yield full realization of programmatic improvements and would provide a better understanding of the implications of proposed EPA actions resulting in increased public participation in Agency decision-making. This alternative would also improve our credibility with environmentalists and others who oppose an exemption for EPA as a weakening of NEPA, as well as helping to forestall efforts by other Federal agencies to obtain an exemption from the EIS requirement. This approach would also generally strengthen EPA's role in asking other Federal agencies to observe strict adherence to the requirements of NEPA.

Application of NEPA to EPA's regulatory programs would on the other hand, seriously disrupt program operations and would require substantial additional manpower resources.

Although the application of NEPA to EPA's programs would not alter the class of persons who could challenge EPA's regulatory actions, the number of situations where challenges could be taken would increase, and the scope of judicial review would be broadened to include at least the adequacy of the impact statement. Ultimately this could lead to the courts taking a more substantive role in reviewing EPA actions and in establishing "standards of performance" for EPA's decision-making process. There are many pending suits brought against

EPA's regulatory programs where non-compliance with NEPA has been raised as an issue. Applying NEPA at this point in time may be premature prior to judicial rulings on these cases.

D. Courses of Actions to be Followed.

In light of the preceding discussion of the advantages and disadvantages of the three major alternative courses of action considered, the Task Force has proposed that EPA continue to maintain its present position that NEPA does not legally apply to its regulatory programs. The Task Force reached this conclusion because of the unclear legislative history of NEPA regarding this issue as well as CEQ's guidelines of April 23, 1971, which provide an exemption for those environmental protective regulatory activities taken or concurred in by EPA. Section 511(C) of the Federal Water Pollution Control Act, as recently amended, also explicitly exempts almost all actions taken by EPA under that Act. In addition, application of NEPA to EPA's programs would be disruptive of the programs' operations, and the benefits to be gained by applying NEPA would not outweigh the significant harm caused by such disruption.

The Task Force has further concluded that the courts are likely to be able to resolve the outstanding issues in the most efficacious manner. Therefore, the Agency should pursue the alternative of seeking judicial determination that NEPA does not legally apply to its regulatory programs.

EPA should, however, implement the spirit of the Act to the greatest extent practical. Therefore, for each program, one of the sub-options mentioned above should be selected. This will enable the regulatory programs to enfuse an analysis of the multi-media effects of actions taken into the decision-making process without being subject to the procedural requirements of NEPA which might substantially delay program objectives.

Five programs are presently under court challenge on grounds of non-compliance with NEPA. For the standard setting and guideline programs under court challenge (setting of national ambient air quality standards and setting of standards of performance for new stationary air sources) EPA should provide for intermediate compliance with NEPA by making available to the public a detailed explanation of each major standard and guideline proposed by the Agency. This analysis would set forth (a) information available to the Agency delineating the major environmental effects of the proposed action; (b) a discussion of pertinent non-environmental factors affecting the decision, including, where relevant under the applicable statute, legal, technical, social, and economic

factors; and (c) an explanation of the viable options available to the Agency, and the rationale for the option selected, in sufficient detail to apprise a reader, not an expert in the subject matter, of the issues. The regulations should be supplemented with internal EPA guidelines setting forth detailed requirements in each program area.

Two other programs under court challenge, suspension of motor vehicle emission standards and cancellation/suspension of pesticides, are quasi-judicial activities and need not be subject to any changes in program operations at the present time. The quasi-judicial activities already have built into their procedures an opportunity for interested parties to participate. In addition, the Agency prepares an analysis of the rationale of the decision made. These procedures are very similar to NEPA and therefore there would be little value in preparing environmental explanations as described for the standard setting and guideline program.

The other program under court challenge is approval of State air implementation plans. The Agency should also pursue judicial determination of the applicability of NEPA in conjunction with this program, but should not make any changes in program operations at the present time. However, EPA should prepare a sample impact statement in connection with a State air implementation plan. This would give the Agency an opportunity to gain a deeper understanding of the advantages and disadvantages of applying NEPA to this program. This approach and the experience gained from it, would also be helpful in deciding whether or not EPA should seek a legislative exemption from NEPA for this particular program.

Most of the regulatory programs not presently under court challenge fall into the standard setting and guideline category: setting of emission standards for hazardous air pollutants; setting of motor vehicle emission standards; solid waste management guidelines; general Federal radiation guidance; generally applicable environmental radiation standards; as well as establishment of effluent guidelines (which is explicitly exempted in the amendment Section 511(c) of the Federal Water Pollution Control Act). The same sub-option of making available to the public a detailed explanation of each major standard and

guideline proposed should be followed for these programs as described in detail for those standard setting programs that are presently under court challenge.

For issuance of individual permits under the water permit program, designation of water hazardous substances, water quality standards program, and for all enforcement actions no changes in the programs' operations need be made. There also need be no change in program operations for the pesticide registration program as well. However, for the same reasons as discussed for the approach to be followed for the approval of State air implementation plans program, EPA should prepare a sample impact statement in connection with a pesticides registration. This sample impact statement would give EPA a better idea of the resources required to apply the impact statement requirement of NEPA to a program with such a large number of actions.

The preceding discussions have shown the great uncertainty which pervades the issue of the application of NEPA to EPA's regulatory activities. The legislative history of NEPA and court decisions to date do not clearly resolve the question of whether or not NEPA applies. This basic legal issue must be determined by the courts before the Agency would be in a position to adequately assess what ultimate course of action to follow.

Because of the large manpower estimates and the possible resulting delays to program objectives, it was concluded that only for those programs that would have a significant benefit from an intermediate compliance approach would the Task Force recommend this course of action be followed. The benefits derived from making public an explanation of each major standard and guideline proposed by the Agency should not conflict with the overall goals of EPA or with the statutory mandates and deadlines of the various programs. Standards and guidelines are defined here as major EPA actions which either prescribe national standards of environmental quality or require national emission, effluent, or performance standards. All such EPA actions should be subject to these regulations, including those arising from recently enacted water, noise, and pesticides legislation.

The preparation of two sample impact statements is an additional step to enable the Agency to have a better understanding of the application of the impact statement requirement of NEPA to EPA's regulatory programs. The manpower actually involved, the possible time delays, and a definition of the contents of the statement should become clearer from the preparation of these two statements. Pending final conclusion

of all outstanding issues, EPA should implement the spirit of NEPA to the greatest extent possible. The Agency should of course review its present position in light of any future court decisions or any additional analysis done.